REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	9 Dec 96	

4. TITLE AND SUBTITLE The Fifth Amendment Takings Implications of Air Force Aircraft Overflights and the Air Installation Compatible Use Zone Program

5. FUNDING NUMBERS

6. AUTHOR(S)

Walter Stewart King

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

George Washington University

8. PERFORMING ORGANIZATION REPORT NUMBER

96-091

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTITUTE OF TECHNOLOGY/CI
2950 P STREET
WRIGHT-PATTERSON AFB OH 45433-7765

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

Unlimited

12b. DISTRIBUTION CODE

19961212 060

13. ABSTRACT *(Maximum 200 words)*

14. SUBJECT TERMS

15. NUMBER OF PAGES
88

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to ***stay within the lines*** to meet ***optical scanning requirements***.

Block 1. Agency Use Only *(Leave blank)*.

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C	- Contract	**PR**	- Project
G	- Grant	**TA**	- Task
PE	- Program Element	**WU**	- Work Unit Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. *(If known)*

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of...; To be published in.... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

- **DOD** - See DoDD 5230.24, "Distribution Statements on Technical Documents."
- **DOE** - See authorities.
- **NASA** - See Handbook NHB 2200.2.
- **NTIS** - Leave blank.

Block 12b. Distribution Code.

- **DOD** - Leave blank.
- **DOE** - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.
- **NASA** - Leave blank.
- **NTIS** - Leave blank.

Block 13. Abstract. Include a brief *(Maximum 200 words)* factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code *(NTIS only)*.

Blocks 17. - 19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

The Fifth Amendment Takings Implications of Air Force Aircraft Overflights and the Air Installation Compatible Use Zone Program

By
Walter Stewart King

B.A. March 1984, Auburn University
J.D. May 1987, Cumberland School of Law, Samford University

A Thesis Submitted to

The Faculty of

The National Law Center

of The George Washington University
in partial satisfaction of the requirements
for the degree of Master of Laws

September 30, 1996

Thesis directed by
Laurent R. Hourclé
Associate Professor of Environmental Law

TABLE OF CONTENTS

Introduction

In 1988, Congress passed the Base Closure and Realignment Act,[1] which began the process that has resulted in the closure and realignment of many Department of Defense (DoD) facilities. By 1988, the Defense budget had been reduced for three straight years and was predicted to decline further. To ensure that scarce DoD resources would be devoted to the most pressing operational and investment needs rather than to maintaining unneeded property, facilities, or overhead, Secretary of Defense Frank Carlucci created the Defense Secretary's Commission on Base Realignment and Closure on May 3, 1988.[2] That Commission recommended closing[3] 86 military installations and realigning[4] 13 others. This action represented a reduction of approximately 3 percent of

---

[1] Pub. L. 100-526, Title II (1988).

[2] During the 1960's, DoD completed base realignments and closures routinely. In the early 1970s, however, DoD found it increasingly difficult to realign or close installations because Congress regulated the base closure process and limited or denied base closure funding. In 1977, President Carter approved legislation (codified at 10 U.S.C. § 2687) requiring DoD to notify Congress when a base is a candidate for reduction or closure; prepare reports on the strategic, environmental and local economic consequences of such actions; and wait 60 days for Congress' response. The requirements of the legislation combined with Congressional reluctance to close military bases, effectively halted base closures. Thus, for a decade after passage of the Section 2687, all attempts at closing major installations failed, and proposed realignments of small military units were often thwarted. As the defense budget declined from its peak in 1985, the size of the U.S. armed forces changed, yet the base structure remained unaltered. As a result readiness was being threatened as the services struggled to pay the operating costs of unneeded bases and infrastructure. *See*, Defense Base Closure and Realignment Commission, 1995 REPORT TO THE PRESIDENT, at 4-3. (Jul. 1, 1995).

[3] Close is defined by the Commission to mean: "All missions of the base will cease or be relocated. All personnel (military, civilian and, contractor) will either be eliminated or relocated. The entire base will be excessed and the property disposed." Defense Base Closure and Realignment Commission, 1995 REPORT TO THE PRESIDENT, Appendix B (Jul. 1, 1995).

[4] *Id.* Realign is defined by the Commission to mean: "Some missions of the base will cease or be relocated, but others will remain. The active component will still be host of the remaining portion of the base. Only a portion of the base will be excessed and the property disposed, with realignment (missions ceasing or relocating) and property disposal being separate actions under Public Law 101-510. In cases where the base is both gaining and losing missions, the base is being realigned if it will experience a net reduction of DoD civilian personnel. In such situations, it is possible that no property will be excessed."

the domestic base structure.[5] As a result of the recommended closures and realignments, an additional 46 installations were designated for increases because units and activities were relocated. Pursuant to the Base Closure and Realignment Act, when the Congressional review period expired without the enactment of a joint resolution of disapproval, the Commission's recommendations went into effect and had the force of law.[6]

In 1989, in response to the fall of the Berlin wall, a weakened Warsaw Pact, improved U.S. - Soviet relations, and the U.S.'s need to reduce its budget, it became clear that the prevailing political climate would result in a decrease in DoD's force structure and budget over the next several years. In response to these changing conditions, Congress passed and the President signed Public Law 101-510,[7] which created an independent, five-year Defense Base Closure and Realignment Commission with closure rounds in 1991, 1993, and 1995. The three rounds held by the Commission resulted in a decision to close 82 major bases and realign 83 others. These closures and realignments along with those approved in 1988 represent a closure of 21 percent of DoD's base capacity.[8]

---

[5] See Department of Defense, Base Closure and Realignment Report, at E-2 (Mar. 1995).

[6] *Id.*

[7] Defense Base Closure and Realignment Act of 1990, Pub. L. No. 101-510 (1990).

[8] See 1995 Report to the President, *supra* note 3, at 3-1. Despite these four rounds of base closures and realignments, reductions in domestic infrastructure in DoD have not kept pace with reductions in funding and force levels. In the last ten years, the defense budget has declined in real terms by almost 40 percent. Under current plans, defense spending will continue to decline in real terms each year through 1999. Overall, DoD has reduced the size of the military services by 30 percent. By the end of this decade, the

(continued . . .)

As these closures and realignments take place, more of the Air Force's aircraft are being concentrated on the remaining bases. This in turn often requires that training ranges be expanded and that operations be modified to satisfy the training requirements of the increased number of aircraft or the new and different types of aircraft now located at the installation. This mix of increased operations and the introduction of new or different, potentially nosier aircraft to a base has historically been a sure formula for generating Fifth Amendment[9] claims of inverse condemnation[10] due to overflights.[11]

In addition, although many Air Force bases were originally sited in remote areas in order to have the least consequence on land owners and businesses, the rapid growth and spread of major metropolitan areas has resulted in the regular and expanding encroachment by private property owners in the vicinity of Air Force bases. This

---

[8] (. . . continued)
Army will have eliminated 45 percent of its division, the Air Force 44 percent of its tactical fighter wings, and the Navy 37 percent of its ships. Secretary of Defense William Perry acknowledged to the Commission that DoD will still have excess infrastructure after the 1995 round of closures and realignments. He, therefore, suggested that an additional round of closures and realignments may be necessary in three to four years, after DoD has absorbed the effects of the closures and realignment from prior rounds.

[9] The Fifth Amendment to the United States Constitution provides: "No person shall...be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation." U.S. Const. amend V.

[10] Inverse Condemnation is a cause of action against a government agency to recover the value of property taken by the agency, though no formal exercise of the power of eminent domain has been completed. Black's Law Dictionary 424 (5th ed. 1983).

[11] *See* Persyn v. United States, 935 F. 2d 69 (1991). The plaintiffs in *Persyn* argued that the increased decibel levels and risks associated with the introduction of C-5 and B-1 aircraft to Kelly AFB, TX had diminished the value of their property and resulted in a taking. The court dismissed the claim based on the statute of limitations. In Jensen v. United States, 305 F. 2d 444 (1962) the court found a taking had occurred based on the increase in the number of flights of B-47 aircraft at McConnell AFB, Kansas. *See also* Branning v. United States, 654 F. 2d 88 (1981); Bacon v. United States, 295 F. 2d 936 (1961); A.J. Hodges Industries, Inc. v. United States, 355 F. 2d 592 (1966); Aaron v. United States F. 2d 798 (1963).

encroachment could have a serious operational impact at some Air Force installations where flying is an active part of the mission. As this encroachment continues and development occurs in areas overflown by Air Force aircraft, the Air Force can expect to see an increase in the number of overflight takings claims.

In order to lessen the impact of encroachment on DoD Facilities, the Air Installation Compatible Use Zone (AICUZ) program was developed to provide local governmental authorities with information on aircraft accident potential and the impacts of aircraft noise on the lands surrounding air installations. The aim of the program is for local governments to use this information to zone the lands surrounding air installations in such a way as to prevent development that is incompatible with the flying operations of the installation.[12]

The Air Force's challenge will be to minimize potential takings litigation while accomplishing its mission in the face of demands placed upon it by base closures, base realignments, and encroachment. This paper will begin by addressing the development of the law governing Fifth Amendment takings for overflights of aircraft, examine the potential impacts that the Supreme Court's decision in *Lucas v. South Carolina Coastal Commission*[13] will have on future litigation in this area, and discuss the defenses available to the Air Force in such cases. Next, the Air Force's Air Installation Compatible Use Zone Program and the takings implications of the program will be discussed. The paper

---

[12] *See* Air Installation Compatible Use Zone Program, Air Force Instruction 32-7063, ¶ 1.2.3. (March 31 1994)[hereinafter AFI 32-7063].

[13] Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992).

will then conclude with a brief discussion of recent takings legislation proposed in Congress and its potential impact on takings claims associated with overflights and the AICUZ program.

I. DEVELOPMENT OF THE FIFTH AMENDMENT JURISPRUDENCE OF OVERFLIGHT TAKINGS

A. The Common Law Approach

The U.S. law governing airspace has undergone significant changes in the past 50 years. Early American common law doctrine governing the ownership of airspace was based on the Roman law maxim *cujus est solum, ejus est usque ad coelum* (whoever has the land possesses all the space upwards to an indefinite extent). This maxim became part of the English common law and was eventually accepted as the predominant common law airspace property rule in English courts.[14] Like many common law rules, this maxim became part of the American tradition[15] and remained the uncontested rule in airspace property rights until after the turn of the century.[16]

With the increase in military and civil aviation, American courts soon faced a plethora of airspace trespass and nuisance cases.[17] These cases caught the American

---

[14] *See* R. Wright, THE LAW OF AIRSPACE 11-30 (1968).

[15] *See* Colon Cahoon, *Low Altitude Airspace: A Property Rights No-Man's Land*, 56 JOURNAL OF AIR LAW AND COMMERCE 157, 161 (Fall, 1990).

[16] *See* Portsmouth Harbor Land & Hotel Co. v. United States, 260 U.S. 327 (1922) (holding that every firing of artillery projectiles over claimant's land constituted a trespass).

[17] Cahoon, *supra* note 15, at 162.

courts without a coherent legal doctrine with which to address the clashes between landowners and aviators. "To hold that every overflight was an actionable trespass would hamper the young industry and the military's ability to train; yet, to allow every low-flying barnstormer to terrorize rural communities with no consequence seemed an equally bad alternative."[18]

B. Air Commerce Act of 1926 - Navigable Airspace Established

Congress attempted to clarify the issue of airspace property rights in the Air Commerce Act of 1926,[19] which was initially proposed in order "to encourage and regulate the use of aircraft in commerce and for other purposes."[20] As part of the Act, Congress established the "navigable airspace" to provide the public with rights to the airspace above the United States analogous to those enjoyed by the public in the use of navigable waters.[21] In fact, most of the provisions of the law were modeled on and often paraphrased from existing maritime laws. The House Report accompanying the bill stated:

> This is natural for the reason the airspace, with its absence of fixed roads and tracks and aircraft with their ease of maneuver, present as to transportation practical and legal problems similar to those presented by transportation by vessels upon the high seas. The declaration of what constitutes navigable air space is an exercise of the same source of power, the interstate commerce clause,

[18] *Id.* at 161.

[19] Air Commerce Act of 1926, 44 Stat. 568, 49 U.S.C. 171.

[20] 67 Cong. Rec. 9386 (1926).

[21] *Id.* at 9391.

> as that under which Congress has long declared in many acts what constitute navigable or nonnavigable waters. The public right of flight in the navigable air space owes it source to the same constitutional basis which, under the decisions of the Supreme Court, has given rise to a public easement of navigation in the navigable waters of the United States regardless of the ownership of the adjacent or subjacent soil.[22]

Relying on this power, Congress declared that the United States has "complete and exclusive sovereignty in the air space."[23] By defining the navigable airspace in terms of minimum safe altitudes of flight, Congress left the specific determination of what constitutes such airspace to the Civil Aeronautics Authority, which defined the minimum safe altitude of flight to be 500 feet above ground level.[24]

C. State Law Approaches

In response to the widespread use of aircraft and Congress' action in declaring the airspace to be within the complete and exclusive sovereignty of the United States, the

---

[22] H.R. Rep. No. 572, 69th Cong., 1st Sess. 9-10 (1926).

[23] Air Commerce Act of 1926, 44 Stat. 568, 574 (codified as amended at 49 U.S.C. § 1301(29) (1982). The Federal Aviation Administration has succeeded the Civil Aeronautics Authority regarding the authority to designate minimum safe altitudes of flight. Although the minimum safe altitude of flight has changed over the years, most recently it has been defined as: (b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft. (c) Over other than congested areas. An altitude of 500 feet above the surface except over open water or sparsely populated areas. In that case, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure. 14 C.F.R. § 91.79 (1985). The statutory definition of navigable airspace was amended by the Federal Aviation Act of 1958 to read: "Navigable airspace means airspace above the minimum altitudes of flight prescribed by regulations issued under this act, and shall include airspace needed to insure safety in take-off and landing of aircraft." 49 U.S.C. §1301 (29) (1982).

[24] *Id.*

States have also limited the scope of a landowner's interest in airspace.[25] For example, in Arkansas "the ownership of the space over and above the lands and waters" of the state are vested in the "owner of the surface beneath, but this ownership extends only so far as is necessary to the enjoyment of the use of the surface without interference and is subject to the right of passage or flight of aircraft."[26] Oklahoma defines airspace owned by the surface owner as that which lies within the "vertical upward extension of his or their surface boundaries."[27] This definition, however, is qualified to "in no way contravene, supersede, amend, or alter . . . other provisions of statutory or common law pertaining to aviation. . . ."[28] Similarly, California defines land to include "free or occupied space for an indefinite distance upwards as well as downwards, subject to limitations upon the use of airspace imposed, and rights in the use of airspace granted by law."[29]

Other states limit the ownership of airspace by implication by codifying limits of lawful flight. For example, in North Carolina, flight in aircraft over the lands and waters is lawful, "unless at such low altitude as to interfere with the then existing use to which the land or water, or the space over the land or water, is put by the owner. . . ."[30] In

---

[25] *See* Ark. Stat. Ann. § 27-116-102 (1995), Cal. Civ. Code §659 (1995), O.C.G.A. §6-2-5 (1995), Delta Air Corp. v. Kersey, 193 Ga. 862, 20 S.E.2d 245 (1942), Idaho Code §55-101A (1995), Burns Ind. Code Ann. § 8-21-4-3 (1995), Md. Transportation Code Ann. § 5-104 (1995), MSA § 10.111 (1994), Mont. Code Anno. § 67-1-203 (1995), 60 Okl. St. § 802, Antonik v. Chamberlain, 81 OApp 465, 78 NE2d 752.

[26] Ark. Stat. Ann. 27-116-102 (1995).

[27] 60 Okl. St. 902 (1995).

[28] *Id.*

[29] Cal. Civ. Code 659 (1995).

[30] N.C. Gen. Stat. 63-13 (1995), Aeronautics.

addition, there is a vast amount of state case law which addresses the property owner's rights in airspace. Although the states have adopted differing approaches to the restrictions placed on the ownership of airspace, there is agreement among the states and with Congress that an individual's property interest in airspace is limited.

D. The Supreme Court Acts - *United States v. Causby*

In 1946, the Supreme Court was presented with its first case dealing with an overflight taking. In *United States v. Causby*, [31] the plaintiff's property was overflown during landing and takeoff by large numbers of heavy bombers and smaller fighter aircraft. The overflights were at very low levels just above the tree tops of plaintiff's property. The court found that the overflights interfered with the normal use of the property as a chicken farm and with the owner's night rest thereby constituting a taking so as to give the owner a constitutional right to compensation.

In *Causby*, the court was called upon to weigh the conflicting interests, on one hand, of the government (and, by implication, the public) for the need to use the airspace for the passage of aircraft, and on the other hand, of the owners of subjacent private property to use and enjoy the subjacent land. The court determined that the landowner does have a property interest in the superadjacent airspace.[32] However, it noted that the airplane is part of modern life and that "the inconveniences which it causes are not

---

[31] Causby, 328 U.S. 256 (1946).

[32] Superadjacent airspace is the airspace directly above the land at low altitudes. *See* Causby, 328 U.S. at 265.

normally compensable under the Fifth Amendment."[33] The court also found the common law doctrine that ownership of the land extended to the periphery of the universe "has no place in the modern world."[34] In reaching this decision, the court deferred to Congress' conclusion that the airspace above the United States is a valuable public resource analogous to the navigable waters of the United States, an area where Congress' vast authority to regulate is clearly recognized. The Supreme Court described Congress' authority to regulate the navigable waters under the Commerce Clause, in *Scranton v. Wheeler.* [35]

> It is commerce, and not navigation, which is the great object of constitutional care. The power to regulate commerce is the basis of the power to regulate navigation and navigable waters and streams, and these are so completely subject to the control of Congress, as subsidiary to commerce, that it has become usual to call the entire navigable waters of the country the navigable waters of the United States. It matters little whether the United States has or has not the theoretical ownership and dominion in these waters, or the land under them; it has, what is more, the regulation and control of them for the purposes of commerce.[36]

Similarly, the court in *Causby*, when addressing the common law doctrine that the landowner possessed the airspace from the surface to the heavens found that:

> [T]his doctrine has no place in the modern world. The air is a public highway, as Congress has declared. Were that not true, every transcontinental flight would subject the operator to countless trespass suits. Common sense revolts against this idea. To recognize such private claims to the airspace would clog these highways, seriously interfere with their control and development in the public

---

[33] *Id.* at 266.

[34] *Id.* at 260.

[35] Scranton v. Wheeler, 179 U.S. 141 (1900).

[36] *Id.* at 160.

> interest, and transfer into private ownership that to which only the public has a just claim.[37]

In addition, the court in discussing the Air Commerce Act of 1926[38] as amended by the Civil Aeronautics Act of 1938[39] found that under these statues:

> [T]he United States has complete and exclusive sovereignty in the air space over this country. 49 U.S.C. 176(a). They grant any citizen of the United States a public right of freedom of transit in air commerce through the navigable airspace of the Untied States. 49 U.S.C. 403. And it is provided that such navigable airspace shall be subject to a public right of freedom of interstate and foreign navigation.

The court also found that the navigable airspace which Congress has placed in the public domain is "airspace above the minimum safe altitudes of flight prescribed by the Civil Aeronautics Authority."[40] As mentioned previously, the Civil Aeronautics Authority established 500 feet above ground level as the minimum safe altitude of flight. The court stressed that "the flights in question were not within the navigable airspace which Congress placed in the public domain."[41] Thus, by implication, the court made clear that flights above that level, because they are in the public domain, would not result in a taking.

In *Causby*, "the United States conceded on oral argument that if the flights over respondent's property rendered it unhabitable, there would be a taking compensable

---

[37] Causby, 328 U.S. at 261.

[38] Air Commerce Act of 1926, 44 Stat. 568, 49 U.S.C. 171.

[39] Civil Aeronautics Act of 1938, 52 Stat. 973, 49 U.S.C. 401.

[40] Causby, 328 U.S. at 261.

[41] Id. at 264.

under the Fifth Amendment."[42] Accordingly, the court held: "Flights over private land are not a taking, unless they are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land."[43] The court also held that continuous invasions of the superadjacent airspace at low altitudes affect the use of the surface itself. Landowners were determined to have an incident of ownership in the superadjacent airspace such that invasions of it were "in the same category as invasions of the surface."[44] The court then noted that it "is the character of the invasion, not the amount of damage resulting from it, so long as the damage is substantial, that determines the question whether it is a taking."[45] The court found that the facts in *Causby* established that there was a diminution in value of the property and that the frequent, low-level flights were the direct and immediate cause. These low level flights were found to impose a servitude upon the land which amounted to the taking of an easement. The case was remanded to the Court of Claims to determine an accurate description of the easement which vest in the United States. Thus, although the court clearly deferred to Congress' authority to regulate airspace under its Commerce Clause authority, it also recognized that landowners retain a property interest in the airspace immediately above their property.

---

[42] *Id.* at 261.

[43] *Id.* at 266.

[44] *Id.* at 265.

[45] *Id.* at 266.

In addition, although the court in *Causby* clearly deferred to Congress' attempt to define the limits of a landowner's property interest, the court noted that "while the meaning of property as used in the Fifth Amendment was a federal question, 'it will normally obtain its content by reference to local law."[46] It then noted that under North Carolina law the flight of aircraft is lawful "unless at such a low altitude as to interfere with the then existing use to which the land or water, or the space over the land or water, is put by the owner, or unless so conducted as to be imminently dangerous to person or property lawfully on the land or water beneath."[47] North Carolina law also stated that "sovereignty in the airspace rests in the State except where granted to and assumed by the United States."[48] Although it is clear that the court in *Causby* did not base its decision on North Carolina law, but on an act of Congress, it found "if we look to North Carolina law, we reach the same result."[49]

E. Limits on the Government's Ability to Define the Scope of Fifth Amendment Protection

The Court's deferral to Congress in establishing the limits of a landowner's interest in airspace raises the issue of what limits should be placed on a government's ability to legislatively define the scope of Fifth Amendment protection. This issue was

---

[46] *Id.* at 265.

[47] *Id.*

[48] *Id.*

[49] *Id.*

addressed by the court in *Ruckelhaus v. Monsanto Co.*[50] and in *Lucas v. South Carolina Coastal Council.* In both of these cases, it was necessary for the court to determine the extent of the plaintiff's property interest. In *Ruckelhaus*, the court determined that "property interests . . . are not created by the Constitution. Rather, they are created and their dimensions are defined by existing rules or understandings that stem from an independent source such as state law."[51] In *Lucas* the court stated:

> In light of our traditional resort to existing rules or understandings that stem from an independent source such as state law to define the range of interests that qualify for protection as property under the Fifth (and Fourteenth) Amendments, this recognition that the Takings Clause does not require compensation when an owner is barred from putting land to a use that is proscribed by those existing rules or understandings is surely unexceptional.[52]

Both of these holdings require that a property interest be defined by independent sources such as state law. These independent sources can include common law and federal laws.[53] *Lucas* places an emphasis on the fact that these "existing rules and understandings" generally provide an objective standard by which the landowner can determine the nature of his property right. This approach is based on the theory that the common law and recently enacted prospective legislation embody traditions which a landowner should be aware of when he acquires property.[54]

---

[50] Ruckelhaus v. Mansanto Co., 467 U.S. 986 (1984).

[51] *Id.* at 1001.

[52] Lucas, 505 U.S. at 1029.

[53] Presault v. United States, 27 Fed. Cl. 69 (1992).

[54] *See* Lucas, 505 U.S. at 1027.

In contrast, the court in *Causby* rejected outright the common law doctrine as having "no place in the modern world." As a result, the independent source, absent state law,[55] for determining one's property interest in airspace was essentially destroyed. The court then deferred to Congress' definition of the relevant property interest. It allowed Congress to restrict the common law notion of property in airspace by declaring that airspace above a certain level was in the public domain. Thus, Congress was essentially allowed to define the limit of a constitutional right.

Although courts should resist allowing the use of the legislative process to define the scope of a constitutional liberty, when one considers the compelling situation with which the court was presented, this outcome is not surprising. The common law doctrine that granted the landowner ownership of all the airspace up to the heavens was apparently created by men who never envisioned the airplane. In addition, as discussed above, in light of the development of air commerce, the airspace above the United States is very much analogous to the use of boats on the navigable waterways. Thus, in light of Congress' vast authority pursuant to the Commerce Clause it was probably no great leap for the court when it determined that Congress possessed the authority to declare that the United States had "complete and exclusive sovereignty in the air space"[56] over this

---

[55] At the time the Air Commerce Act of 1926 was passed, those states that had codified a definition of land generally applied the common law approach considering the property to include the upper reaches of the airspace above it. Thus, state law at the time was consistent with the common law approach.

[56] Causby, 328 U.S. at 260.

country, and that there was "a public right of freedom of transit in air commerce through the navigable airspace of the Untied States."[57]

F. The Federal Aviation Act of 1958

Following the decision in the *Causby* case and faced with the rapid post-war expansion of aviation, Congress in the Federal Aviation Act of 1958 reconsidered the regulation of airspace as contained in the Air Commerce Act of 1926. In this new Act, Congress redefined navigable airspace to mean "airspace above the minimum altitude of flight prescribed by regulation (500 feet) and airspace needed to ensure safety in takeoff and landing of aircraft."[58] Thus, the definition of navigable airspace was expanded to include that airspace below 500 feet needed for takeoff and landing. This new definition of airspace raised the issue of whether flights within the navigable airspace below 500 feet during takeoff and landing could result in a taking of the land beneath.

G. The Limits of the Supreme Court's Deference to Congress- Griggs v. Allegheny County

In *Griggs v. Allegheny County,*[59] the court dealt with Congress' expansion of the definition of navigable airspace. In *Griggs*, the flight pattern at the county airport

---

[57] *Id.*

[58] 72 Stat. 739, 49 U.S.C. § 1301(24).

[59] Griggs v. Allegheny County, 369 U.S. 84 (1962).

required planes to takeoff and land by passing within 30 to 300 feet above plaintiff's house. The noise was "comparable to that of a noisy factory."[60]

Although all the flights on takeoff and landing were within the navigable airspace defined by Congress, the court found that a taking of an air easement had occurred. In reaching its decision the court noted that:

> At the time of the Causby case, Congress had placed the navigable airspace in the public domain, defining it as 'airspace above the minimum safe altitudes of flight prescribed' by the C.A.A. 44 Stat. 574. We held that the path of the glide or flight for landing or taking off was not the downward reach of the 'navigable airspace.' 328 U.S., at 24"

The Court then noted that the Act was amended in response to its holding that the airspace needed for takeoff and landing was not included in the navigable airspace. Although this airspace was now included in the definition of navigable airspace, the court referred to that portion of its holding in *Causby* which states: "use of land presupposes the use of some of the airspace above it otherwise no home could be built, no tree planted, no fence constructed, no chimney erected . . . .[61] An invasion of the superadjacent airspace will often affect the use of the surface of the land itself."[62] Thus, the court in *Griggs*, by reference to *Causby*, made a point of distinguishing between the impact of flights within the navigable airspace above 500 feet and those below 500 feet. Although the court in *Causby* was willing to defer to Congress in its judgment of what constitutes

---

[60] *Id.* at 86.

[61] Causby, 328 U.S. at 264.

[62] *Id.* at 265.

navigable airspace, its refusal to defer to Congress' expanded definition of airspace made clear that there were limits to that deference.

H. The Court's Test for Overflight Takings

Causby and *Griggs* essentially established the test that has been followed in virtually all subsequent overflight takings cases.[63] This test has been interpreted to require a consideration of four factors: (1) the planes flew directly over the claimant's land; (2) the flights were low and frequent; (3) the flights directly and immediately interfered with the claimant's enjoyment and use of the land; and (4) the interference with enjoyment and use was substantial.[64] In *A.J. Hodges Indus. Inc. v. United States*,[65] the court articulated this test as follows:

> [T]he courts have held that when regular and frequent flights by Government-owned aircraft over privately owned land at altitudes of less than 500 feet from the surface of the ground constitute a direct, immediate, and substantial interference with the use and enjoyment of the property, there is a taking by the Government of an avigation easement,[66] or easement of flight, in the airspace over the property, and that this taking is compensable under the Fifth Amendment to the Constitution.[67]

---

[63] *See* Matson v. United States, 171 F. Supp. 283 (Ct. Cl. 1959); Aaron v. United States, 311 F. 2d. 798 (Ct. Cl. 1963); A.J. Hodges Indus. v. United States, 355 F. 2d. 592 (Ct. Cl. 1966); Lacey v. United States, 595 F. 2d. 614(Ct. Cl. 1979); Brown v. United States, 73 F. 3d 1100 (Fed. Cir. 1996).

[64] Brown v. United States, 73 F. 3d 1100 (Fed. Cir. 1996).

[65] A. J. Hodges Indus. Inc. v. United States, 355 F. 2d 592 (1966).

[66] Takings that result from overflights are often referred to as "avigation easements" (by analogy to the sovereign's right of navigational servitude in navigable waters of the sovereignty) and as an "easement of flight" (by analogy to easements taken by the sovereign in the airspace over land for public purposes). *See* Branning v. United States, 654 F. 2d 88, 91, note 1.

[67] A. J. Hodges Indus. Inc., 355 F. 2d at 594. *See also* Bacon v. United States, 295 F. 2d 936 (1961); Lacey v. United States, 595 F. 2d 614, 616 (1979); Bodine v. United States, 210 Ct. Cl. 687, 688 (1976); Mid-States Fats and Oils Corp. v. United States, 159 Ct. Cl. 301, 309 (1962).

I. The Impact of the 500 Foot Rule - *Aaron v. United States*

In contrast to *Causby*, *Griggs*, and *Hodges*, which all dealt with flights below the 500 feet minimum safe level of flight, the court in *Aaron v. United States,*[68] was squarely presented with the issue of the effect of Congress' definition of "navigable airspace" to include airspace over 500 feet. In *Aaron*, the Air Force took over operation of a Los Angeles County airport and began using it to conduct flight-testing of the Air Force aircraft being produced at the adjacent Air Force Plant No. 42. The flights from the airport passed over some of the plaintiff's parcels below 500 feet, while the flights over other parcels were above 500 feet.[69] The court determined that only plaintiffs who complained of overflights under the 500 foot level had stated a proper cause of action. In reaching its decision, the court found:

> It is true that the inconvenience and annoyance experienced from the passage of a plane at 501 feet above a person's property is hardly distinguishable from that experienced from the passage of a plane at, say, 490 feet, but the extent of a right-of way, whether on the ground or on water or in the air, has to be definitely fixed. Congress has fixed 500 feet as the lower limit of navigable air space: what may be permissible above 500 feet is forbidden below it, unless compensation is paid therefore.[70]

Thus, even though plaintiffs may not recover for flights above the 500 minimum altitude of flight which are thus in the public domain, claims for a taking below 500 feet where aircraft are taking off and landing, although statutorily part of the public airspace, may be

---

[68] Aaron v. United States, 311 F. 2d 798 (Ct. Cl. 1963).

[69] *Id.* at 801.

[70] *Id.*

compensable if the flights are so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land.

J. The Exception to the Rule - *Branning v. United States*

The notable exception to this rule is *Branning v. United States.*[71] "The novelty of this decision is in its holding that defendant's use of airspace at altitudes above 500 feet, and independent of landing and takeoff, may be a taking of land beneath if the use is peculiarly burdensome."[72] In *Branning*, the plaintiff, a land developer, sought recovery from the United States for the diminution in value of his land due to regular and frequent overflights by Marine Corps F-4 aircraft. The flights were from a Marine Corps training field for simulated aircraft carrier landings.[73] In order to perform this maneuver, trainees were required to fly F-4 jets with their nose up and tails down, with near maximum power applied, as they approached the simulated carrier deck at low speeds and altitudes. Since training was conducted squadron-by-squadron, and each plane repeated the maneuver several times, the air traffic to the runway was virtually nose-to-tail over a period of several days during each month in which the training was conducted.[74] The plaintiff in *Branning* owned 525 acres over which these F-4 aircraft flew while practicing

---

[71] Branning v. United States, 654 F. 2d 88 (Ct. Cl. 1981).

[72] *Id.* at 90.

[73] *Id.* at 91.

[74] *Id.*

at the Marine field.[75] A claim was brought against the United States for the taking of an avigation easement over the plaintiff's land.[76] The overflights complained of were at 600 feet above the plaintiff's property, while the minimum safe altitude for that airspace was 500 feet.[77]

According to the rationale of *Causby* and its progeny, which held that a landowner had no property interest in the navigable airspace over 500 feet, *Branning* should have been dismissed. The court, however, concluded: "It is clear that the Government's liability for a taking is not precluded merely because the flights of Government aircraft are in what Congress has declared to be navigable airspace and subject to its regulation."[78] The court determined that the flights over the plaintiff's land resulted in "unavoidable damage (reduction of the highest and best use) occasioned by the noise created during travel in the navigable airspace which was so severe as to amount to a practical destruction of the land."[79] In support of this conclusion the court stated:

> The question thus raised is whether the 500-foot altitude is so critical a measure of the avigational servitude that liability can be avoided simply by flying noisier aircraft at an altitude of 501 feet. Minimum safety altitude and minimum noise levels are concerned with two different things. While safety may be measured in terms of altitude, a reasonable noise level cannot be measured solely in terms of altitude. . . . Since the subjacent property owner has suffered a diminution of

---

[75] *Id.*

[76] *Id.* at 90-91.

[77] *Id.* at 91-92.

[78] *Id.* at 99.

[79] *Id.* at 102.

the value[80] of his property . . . it is abundantly clear that under the law established by Causby, Griggs, and Aaron a taking has occurred in this case.[81]

Although the *Branning* decision conflicted with that of *Aaron,* the court refused to reject *Aaron* outright. The per curium opinion in *Branning* very carefully explained that the holding was limited to the specific facts of the case. "This hesitancy to reject the *Aaron* opinion meant that *Branning* would have little influence on airspace property issues in the future."[82] In fact, courts can simply treat *Branning* as the exception to the rule.

II. Potential Impacts of the Supreme Court's Decision in Lucas v. South Carolina Coastal Commission on the Law Relating to Overflight Takings

A. Lucas v. South Carolina Coastal Commission - An Overview

Having reviewed the development of the law in the area of overflight takings, the Supreme Court's recent decision in *Lucas v. South Carolina Coastal Council*[83] must be examined to determine whether the decision will impact future litigation in the area of overflight takings. In *Lucas,* the plaintiff bought two residential lots on a South Carolina

---

[80] It should be noted that the court in Branning did not rely on diminution of value alone to reach its decision. The court focused on the impacts that the flights had on the land and the owner's use of the land. The court also relied heavily on the fact that the Marine Corps had published a study which indicated that the noise from that aircraft made the land unsuitable for residential use. Thus, the court's reference to "diminution in value" does not conflict with the Supreme Court's decisions in Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922) and Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978) which establish that mere diminution in value alone will not constitute a taking.

[81] Branning, 654 F. 2d at 102.

[82] Cahoon, *supra* note 15, at 191.

[83] Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992).

barrier island, intending to build single-family homes similar to those on the immediately adjacent property.[84] At the time plaintiff bought the lots, they were not subject to any coastal zone building permit requirements.[85] In 1988, however, the state enacted a statute which barred the plaintiff from erecting any permanent habitable structures on his property.[86] Plaintiff filed suit contending that the statute deprived him of all "economic viable use" of his property and therefore effected a taking under the Fifth and Fourteenth Amendments.[87]

1. The Logical Antecedent Inquiry

In *Lucas*, the Supreme Court emphasizes examining the "pre-existing" limitations on the landowner's title to determine the extent of his property interest. The court's focus is on the "landowner's expectations as of the date on which he acquired his interest."[88] Pursuant to *Lucas*, a state may resist compensating property owners for burdensome regulation:

> [O]nly if the logically antecedent inquiry into the nature of the owner's estate shows that the proscribed use interest were not part of his title to begin with. This accords, we think, with our "takings jurisprudence," which has traditionally been guided by the understandings of our citizens regarding the content of, and the

[84] *Id.* at 1006-1007.

[85] *Id.* at 1007.

[86] *Id.* at 1008.

[87] *Id.*

[88] Presault v. United States 27 Fed. Cl. 69, 86 (1992).

> State's power over, the "bundle of rights" that they acquire when they obtain title to property. . . . [89]

The court, in *M&J Coal Co. v. U.S.*,[90] interpreted *Lucas* to create a two-tiered approach to analyzing takings claims:

> First a court must determine whether the claimant held a property right that is compensable under the Fifth Amendment. A compensable right does not exist if it was not part of the claimant's title at the time the claimant took title to the property. For example, if at the time of sale an existing law or regulation precluded a certain use, that use was never a "stick" in the purchaser's "bundle of rights." Second, if the claimant establishes the existence of a compensable right, the court must determine whether the governmental action constituted a taking of that right.[91]

Under the "logically antecedent inquiry" required by these cases, the court must first inquire into the "nature of the owner's estate" to determine if the uses of the land proscribed by regulation were originally part of the owner's title. As mentioned earlier, in determining what is included in the owner's "bundle of rights," the court looks to existing rules or understandings that stem from an independent source such as state law to define the range of interests that qualify for protection as property under the Fifth and Fourteenth Amendments. These decisions attempt to define compensable property according to the objective understandings of the property owners themselves. In other words, the property must be defined based on the objective manifestation of traditions found in the common law or recently enacted prospective legislation. The Supreme Court

---

[89] Lucas, 505 U.S. at 1026.

[90] M&J Coal Company v. United States, 30 Fed. Cl. 360 (1994). In *M&J Coal*, the court held that enforcement actions of the Office of Surface Mining did not amount to a taking of the mine operators property.

[91] *Id.* at 367.

believes that these are manifestations and principles that owners should be aware of when they acquire property.[92]

2. *Per Se* Takings

In addition to its emphasis on the logical antecedent inquiry, the court in *Lucas*, created a standard for a *per se* taking in cases involving a physical invasion of land. The court found: "Where permanent physical occupation of land is concerned, we have refused to allow the government to decree it anew (without compensation), no matter how weighty the asserted public interests involved - though we assuredly would permit the government to assert a permanent easement that was a pre-existing limitation upon the landowner's title."[93]

The court also created a standard for a *per se* confiscatory regulatory taking ("*i.e*, regulations that prohibit all economically beneficial use of land"[94]). "The new rule is that a regulation depriving a landowner of all economically viable use of his property will be deemed a taking without regard to the public interest served, except when a nuisance or

---

[92] *See* Ruckelhaus v. Mansanto Co. 467 U.S. 986, 1001, 1005 (1984), Webb's Fabulous Pharmacies, Inc. v. Beckwith, 449 U.S. 155, 161 (1980), Board of Regents v. Roth, 408, U.S. 564, 577 (1980), PruneYard Shopping Center v. Robins, 447 U.S. 83, Kaiser Aetna v. United States, 444 U.S. 164, 175 (1979), Pennsylvania Central Transportation co. v. New York City, 438 U.S. 104, 124 (1978).

[93] Lucas, 505 U.S. at 1028.

[94] *Id.* at 1029.

limitation on title imposed by [pre-existing] state [or federal] law is involved."[95] Thus, if a compensable property interest is not established by the logically antecedent analysis, then, *Lucas' per se* takings would not apply.

3. Applicability of the Penn Central Tripartite Test

If the facts of a case do not meet the test of either of these per se takings, "the court examines the three factors set out in *Penn Central Transportation Co. v. New York City* to ascertain if public action works a taking."[96] The factors to be examined include: the character of the government action; the extent to which the regulation interferes with reasonable investment-backed expectations; and the economic impact of the government action.[97] However, once again, the logically antecedent inquiry must first be addressed to determine if the landowner possesses a property right compensable under the Fifth Amendment.

---

[95] Presault v. United States, 27 Fed. Cl. 69, 86 (1992). In *Presault*, Plaintiff's claimed compensation for efforts by the federal government to use portions of a railroad right of way as a bicycle path. Applying the Supreme Court's *Lucas* analysis, the court held that the plaintiff's could have no reasonable expectation of compensation at the time they acquired the property. this was based on the historic extensive federal regulation of the railroad industry and the nature of the easement. *See also,* M&J Coal Co. v. United States, 30 Fed. Cl. 360 (1994).

[96] *Id.* at 95.

[97] Penn Central Transportation Co, 438 U.S. at 124.

B. Applicability of Lucas' *Per se* Takings to Overflights

1. Physical Invasion

Having reviewed the Supreme Court's holding in *Lucas* and other modern cases which applied its test, *Lucas'* impact on the *Causby* test must be analyzed. Because Congress has declared the airspace above 500 feet to be within the "complete and exclusive sovereignty of the United States" it is clear that the *per se* takings under *Lucas* would have no applicability to flights over 500 feet that occurred after enactment of the Air Commerce Act of 1926. *Lucas* established that the government is allowed to assert as a defense to a *per se* physical occupation claim the fact that there is a permanent easement that was a pre-existing limitation upon the landowner's title.[98]

The court cited *Scranton v. Wheeler*[99] as an example of a case where a permanent easement was a pre-existing limitation on the landowner's title. In *Scranton*, the court found that even though under state law the riparian owner's[100] title extended to the middle line of a lake or stream, his rights are subject to the "public easement of servitude of navigation."[101]

As discussed above, the legislative history surrounding the Air Commerce Act of 1926 clearly indicates that Congress determined the navigable airspace to be analogous to

---

[98] H.R. Rep. No. 572, *supra* note 22.

[99] Scranton, 179 U.S. at 141.

[100] A riparian owner is "one who owns land on bank of river, or one who is owner of land along, bordering upon, bounded by, fronting upon, abutting or adjacent and contiguous to and in contact with river." BLACK'S LAW DICTIONARY 690 (5th ed. 1983).

[101] Scranton, 179 U.S. at 161.

the navigable waters. This is reflected in its finding that "the public right of flight in the navigable air space owes its source to the same constitutional basis which . . . has given rise to a public easement of navigation in the navigable waters of the United States."[102] In fact, the legislation creating and regulating the navigable airspace was patterned after that controlling the navigable waters. Thus, it is logical to conclude that a public easement for navigation of flight for flights above 500 feet should be afforded the same status as the navigational servitude in *Scranton*. The government, therefore, should be able to assert as a defense a permanent easement regarding flights within the navigable airspace over 500 feet.

2. Confiscatory Regulation

Lucas' other *per se* exclusion protects the landowner from confiscatory regulations; that is, regulations that prohibit all economically beneficial use of land. "Any limitation so severe cannot be newly legislated or decreed (without compensation), but must inhere in the title itself, in the restriction that background principles of the State's law of property and nuisance already place upon land ownership."[103] Once again, it could be argued that pursuant to pre-existing federal law, the limitation on the use of airspace over 500 feet inheres in the title itself; therefore, the government also has a defense to this *per se* taking for flights over 500 feet.

---

[102] H.R. Rep. No. 572, *supra* note 22.

[103] Lucas, 505 U.S. at 1029.

However, the applicability of *per se* takings tests does remain an issue for flights below 500 feet. Because overflights are not an actual occupation of the land, it is hard to imagine that the *per se* physical occupation test would have any applicability to an overflight case. This is because, under the Supreme Court's analysis of overflight takings, the *Causby* test must first be applied to determine if the overflights have resulted in interference with the land that is essentially equivalent to physical occupation.

The application of the *per se* taking test for a confiscatory taking, however, would appear to be consistent with *Causby*. This test requires that a taking be found when regulation results in destruction of all economically viable use of the property. A review of the cases reveals that the use of this test and the "substantial interference" test under *Causby* could yield similar results. In *Causby* and *Griggs*, the flights so interfered with the land as to destroy its use for agricultural or residential uses. While the court in these cases did not find that the plaintiff was denied all economically beneficial use of the land, it is possible that flights could be so low and frequent as to have such an effect. Thus, it is only logical to conclude that, if an overflight denies a property owner all beneficial use of his property, the overflights are no doubt causing a direct, immediate and substantial interference with the enjoyment and use of the land as required by *Causby*.

C. Lucas' Applicability to Cases That Do Not Constitute a *Per se* Taking

Having discussed the effects of Lucas' *per se* takings test in the area of overflights, the focus now turns to its application to overflights which do not constitute *per se*

takings. The courts have rejected the common law doctrine, *ad coelum*, and deferred to Congress' definition of navigable airspace as that which is above 500 feet.[104] In light of these findings, for flights above 500 feet,[105] the "logical antecedent inquiry" into the existence of compensable property must be answered in the negative. Certainly Congressional action, followed by years of deference by the courts, creates a principle of law which serves as an objective manifestation to landowners that the airspace over 500 feet is not part of their "bundle of rights." This conclusion is also supported by *Lucas'* finding that the government, in a case of physical occupation, may "assert a permanent easement that was a pre-existing limitation upon the landowner's title."[106] If, however, the flights in question are below 500 feet, the "logical antecedent inquiry" necessarily requires a finding that the landowner does possess a compensable property interest. Once it is established that the landowner does in fact have a compensable property interest, the second test required by *Lucas* as articulated in the *M&J Coal* decision must be answered: Is the governmental action a taking of that right?

D. *Penn Central's* Applicability to Overflight Takings

As discussed above, normally the *Penn Central* test should be applied if a claim is not a *per se* taking. However, the United States Court of Appeals' for the Federal Circuit

---

[104] H.R. Rep. No. 572, *supra* note 22.

[105] This would be the case in non-congested areas. For congested areas, the navigable airspace is defined to be 1000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft. *See supra* note 23.

[106] Lucas, 505 U.S. at 1028.

post-*Lucas* decision in *Brown,*[107] suggests use of *Causby* as the takings test for overflight cases. A comparison of the two tests, however, reveals that they would often produce similar results when applied to overflight cases. The *Penn Central* test requires an analysis of: the character of the government action; the extent to which the regulation interferes with reasonable investment-backed expectations; and the economic impact of the government action.[108] The *Causby test* requires that: aircraft interference must be directly overhead, at low levels, frequent, and represent a substantial interference with the use and enjoyment of one's property.

Referring to *Causby*, the court in *Penn Central,* while discussing the character of governmental action, found that "a taking may more readily be found when the interference with property can be characterized as a physical invasion by government than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good."[109] As the basis for an overflight

---

[107] Brown v. United States, 73 F. 3d. 1100 (Fed. Cir. 1996). *Brown* is the only reported overflight taking case decided in federal court since the court's *Lucas* decision. The court in *Brown* continued to apply the *Causby* test post-*Lucas.* The Browns own a 6,858 acre ranch near Del Rio, in West Texas. The Air Force since January 1991 uses a small airfield, Wizard Auxiliary Airfield, near the Browns' ranch, to train its pilots. Flights out of Laughlin Air Force Base, abut 25 miles to the northwest of Wizard, conduct "touch and go" exercises on the Wizard airstrip. On take off and landing from Wizard's airstrip, planes fly less than 500 feet above ground level over at least 100 acres of the Browns' property. At trial, the U.S. Court of Federal Claims held that pursuant to *Causby* " the Browns could not recover as a matter of law, because although the occurrence of frequent and low overflights was undisputed, the Browns had not shown substantial interference with their present enjoyment and use of the overflown surface property." On appeal, the court determined that summary judgment was improperly granted. The court found that the proper test to be applied was indeed the *Causby* test. The case was remanded for further findings regarding *Causby*'s requirement that the flights directly, immediately, and substantially interfered with the claimant's enjoyment and use of the land.

[108] Penn Central Transportation Co, 438 U.S. at 124.

[109] *Id.*

taking is a physical invasion, the Penn Central court implies that it would more readily find a taking in an overflight case than in a case involving a state's authority to zone property.

In addition, *Penn Central*'s test regarding interference with investment backed expectations is capable of yielding the same result as *Causby*'s requirement for substantial interference with the use and enjoyment of one's property. For example, in *Causby* there is little doubt that the landowner's investment-backed expectation of using his land for a residence and chicken farm were destroyed by the government's actions. Although these two test are capable of yielding similar results, it is clear that *Causby*'s definition of a taking is narrower and more objective than that found in *Penn Central*. *Penn Central* provides a broader, more subjective test which could theoretically lead to a finding of a taking in more circumstances than *Causby*. However, as illustrated above, when the *Penn Central* test is applied to an overflight takings case, it is essentially equivalent to *Causby*'s substantial interference with use test. In fact, it could be argued that *Penn Central*'s emphasis on the financial impact of the government's action is essentially another method of determining whether the overflight's interference with the property is or isn't "substantial."

III. Fifth Amendment Defenses Available Post-Lucas

A. Statute of Limitations

Having reviewed the law governing compensation for overflights and the potential impacts of *Lucas*, defenses available to the government in such cases must be examined.

One procedural defense of particular importance is the statute of limitations. Claims that the United States has taken an avigation easement must be brought within six years of the date of the alleged taking.[110] Such claims in overflight cases begin to accrue and the 6-year period of limitations begins to run when regular and frequent intrusions by noisy aircraft into the airspace above the land in question begin to interfere seriously with the use and enjoyment of such land.[111]

B. Direct Invasion of Airspace Required

In addition to the statute of limitations defense, the four elements of the *Causby* test necessarily create four substantive defenses. The first element requires that aircraft "directly" invade the airspace over the property. In *Batten v. United States,*[112] plaintiffs resided next to an active military installation. Operations at the base produced:

> [S]ound and shock waves which cross plaintiffs' properties and limit the use and enjoyment thereof. . . . Strong vibrations cause windows and dishes to rattle. Loud noises frequently make conversation and use of the telephone, radio, and television facilities impossible and also interrupt sleep.[113]

---

[110] 28 U.S.C. 2501; *See* Powell v. United States, 1 Cl. Ct. 669 (1983); Hero Lands v. United States, 1 Ct. Cl 102, 106-107 (1984).

[111] *See* Brin v. United States, 159 Ct. Cl. 332, 339 (1962). The courts have also recognized that there may be a prior, or incremental taking. This is to say that if aircraft flights occurring before the six year statute of limitations created substantially the same level of interference, the action would be barred. If, however, there has simply been an increase in the amount of interference over that which existed prior to the six years, the courts may find only a partial taking, and compensation would be calculated accordingly. *See* Hero Lands v. United States, 1 Ct. Cl 102, 106-107 (1984); Hodges Industries, Inc. v. United States, 355 F. 2d 595, 594 (1966).

[112] Batten v. United States, 306 F. 2d 580 (10th Cir. 192), cert. denied, 371 U.S. 955 (1963).

[113] *Id.* at 582.

The *Batten* court found a substantial diminution in the value of the plaintiff's homes, however, there were no flights over the plaintiffs' property. Noting that recovery had been uniformly denied "absent invasion," the court dismissed the complaint.[114] The same result was reached where flights were "alongside" plaintiff's property,[115] and where engine test cell operations adjacent to plaintiffs' property interfered with the subject properties.[116] Thus, even though the particular activity complained of may interfere substantially with the use and enjoyment of the property, the courts will not find a taking unless the airspace over the property has been directly invaded.[117]

C. Low and Frequent Flights Required

The second element of the *Causby* test requires that the flights be "low" and "frequent." As discussed above, *Causby* and its progeny clearly indicate that flights above 500 feet are in the public domain, therefore; a landowner would not have a compensable property interest in airspace above 500 feet. Thus, the government has a

---

[114] *Id.* at 584.

[115] Freeman v. United States, 167 F. Supp. 541 (W.D. Okla. 1958).

[116] Pope v. United States, 173 F. Supp. 36 (N.D. Tex. 1959).

[117] Nor will plaintiffs be able to recover under the Federal Tort Claims Act (FTCA), 28 U.S.C. §§ 1346(b), 2671, 2672 and 2674-2680, if the overflights are within the navigable airspace or conducted pursuant to other Federal Aviation Administration (FAA) regulations. The FTCA only allows recovery "for injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred." 28 U.S.C. § 1346(b). Flights conducted within the navigable airspace or pursuant to FAA regulations are lawful and thus would not satisfy the FTCA's requirement that the damage or injury result from a negligent or wrongful act. For a thorough discussion of the FTCA's applicability to aircraft operations, *see* Robert A. Shapiro, *Federal Tort Claims Act: Claims Arising Out of Operation of Aircraft*, 5 A.L.R. FED. 440.

defense in cases where the flights involved are above 500 feet. However, where these flights are below the navigable airspace, the landowner may be found to have a compensable property interest and the "low" element of the *Causby* test is present. Although the law is clear on what constitutes "low" flight, there is little case law as to what constitutes "frequent" flying. In addition, frequency only becomes an issue if the other *Causby* elements are present. While it was evident in *Jensen v. United States*, that seven hundred flights daily with a takeoff and landing every two minutes was a taking,[118] other cases have not been as evident. For example, in *Aaron*, two flights per day under 500 feet were determined not to have substantially interfered with plaintiff's property.[119] However, a dozen was enough to establish a taking where flights continued to increase daily.[120] As *Aaron* demonstrates, there is no ready rule as to how frequently a plaintiff's property must be directly overflown at low levels to constitute a taking, but it clearly indicates that an occasional direct overflight is insufficient.

---

[118] Jensen v. United States, 305 F. 2d 444, 445 (1962). In *Jensen,* the Government argued that the statute of limitations should bar the plaintiff's claim. The Government contended that flights of B-47 aircraft from McConnell Air Force Base began to interfere with plaintiff's land in 1951. The plaintiff asserted that the interference did not take place until sometime after 1952. The court found that in 1950, 1951 and early 1952, there were only about two tests of new aircraft a day at the base. The court compared that to the daily average of 700 flights per day occurring in 1958. In reaching its decision the court found: "There is, unfortunately, no simple litmus test for discovering in all cases when an avigation easement is first taken by overflights. Some annoyance must be borne without compensation. The point when that stage is passed depends on a particularized judgment evaluating such factors as the frequency and level of the flights; the type of planes; the accompanying effects, such as noise or falling objects; the uses of the property; the effect on values; the reasonable reactions of the humans below; and the impact upon animals and vegetable life." 311 F. 2d at 446.

[119] Aaron, 311 F. 2d at 800.

[120] *Id.*

D. Direct, Immediate and Substantial Interference Required

The third and fourth elements of the *Causby* test require that the flights, having met all the other criteria, must result in "a direct and immediate interference with the enjoyment and use of the land"[121] and that such interference be substantial.[122] In *Causby*, the highest and best use of the property as a chicken farm was destroyed. In *Speir v. United States*[123] the standard was "a direct, immediate, and substantial interference with the use and enjoyment of property."[124] As is apparent, the language used to describe interference in these cases is necessarily general, but a useful analogy can be drawn to regulatory takings cases. These cases hold that diminution in value alone, even if substantial, does not constitute a taking.[125] Arguably, plaintiffs must prove a substantial interference with the use and enjoyment of their property that extends beyond the simple diminution of property values. As discussed in the comparison of the *Penn Central* and

---

[121] Causby, 328 U.S. at 266.

[122] Jensen, 305 F. 2d at 447-448.

[123] Speir v. United States, 485 F. 2d 643 (1973). In *Speir*, the court found that flights by Army helicopters at altitudes as low as 250 feet and generally below 500 feet over the plaintiffs residence and 683 acre farm constituted a taking. The helicopters involved overflew plaintiff's land to reach a temporary training strip constructed for use during the Vietnam war. During the 4 1/2 year period that the temporary landing site was in use the flights averaged between 9,434 to 11,533 flights per month. The court found that the flights interfered with television reception, telephone conversations and personal conversations. In addition, because the noise from the helicopters caused dove and quail to leave the land, the hunting on the land was ruined. The court found that this evidence supported a finding that there was a direct, immediate, and substantial interference with the land. Although the taking was temporary (4 1/2 years) the court found that it was compensable under the fifth amendment.

[124] *Id.* at 646.

[125] *See* Agins v. City of Tiburon, 447 U.S. 255, 261-262 (1980) (zoning that greatly reduced value of property not a taking where plaintiff could still build up to five homes on property); *see also*, Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978) (diminution in value alone does not affect a taking); Deltona v. United States, 657 F.2d 1184 (1981) (diminution in value by itself cannot establish a taking).

Causby tests, the *Causby* test is generally consistent with these regulatory takings cases which require substantial diminution in economic viability.

E. Applicability of Defenses and Causby test to lands purchased before 1926.

These defenses assume application of the *Causby* test to cases in which the property was purchased after Congress exerted control over the navigable airspace in the Air Commerce Act of 1926. Under a *Lucas* analysis into the logical antecedent inquiry, this raises the issue of what the rights are of those individuals who acquired property prior to the government's exerting its control over the navigable airspace. Under the logical antecedent inquiry, if the property was purchased prior to 1926, the owner under common law would have a protected property interest in the airspace above his land;[126] therefore, theoretically the proper test to be applied to overflight takings cases involving property purchased before 1926 would be *Lucas*. However, on a practical level, one should expect the courts to continue to apply the well established *Causby* test to all overflight cases regardless of the date the property interest was acquired.

[126] Prior to 1926, all the states essentially followed the common law doctrine; therefore, relying on state law to determine a property owners compensable property interest would yield the same result. However, after the Air Commerce Act of 1926, Congress pre-empted regulation of the airspace; therefore, any state laws conflicting with the federal statute after that point would not serve to define the compensable property interest of the landowner.

IV. The Impacts of *Lucas* and *Causby* on Future Overflight Cases

As the Base Closure and Realignment process continues, the Air Force will continue to have changing operational needs. This, coupled with ever changing technological advances and tactics that often require changes in operations, will no doubt mean that the Air Force will continue to face inverse condemnation claims as a result of overflights. The outcome of future overflight litigation, however, should be more predictable as a result of the Supreme Court's holdings in *Lucas*, which combined with the *Causby* test provides the modern framework for analyzing overflight taking claims.

V. Air Installation Compatible Use Zone (AICUZ) Program

A. The Problem - Encroachment

One of the issues associated with overflight takings is that of encroachment. In response to ever increasing encroachment by local communities, the Air Force, in 1970, created the "greenbelt program" to provide a protective rectangular buffer area of about one mile on each side and two and a half miles from the end of base runways.[127]

This concept was later refined into the AICUZ program which was initiated by the Department of Defense in 1974.[128] AICUZ is a planning program that attempts to determine the impact of aircraft operations on the communities around flying bases and then transmits this information to the local planning and zoning commissions to assist

---

[127] C. V. Glines, *Closing in on the Airfields*, AIR FORCE MAGAZINE, Jan. 1989, at 74.

[128] Air Installations Compatible Use Zones, 32 C.F.R. § 256 (1977)[hereinafter *AICUZ*].

them in making local comprehensive planning and zoning decisions. The program has a twofold purpose: first, to protect Air Force installation operational capability from the effects of incompatible land use, and second, to assist local, area wide, state and federal officials in protecting and promoting public welfare and safety by providing information on aircraft accident potential and noise.[129]

Each military department is required to develop, implement, and maintain an AICUZ program for each installation with a flying mission.[130] The aim of the program is for local governments to use the information provided by the base to zone the lands surrounding air installations in such a way as to prevent development that is incompatible with the flying operations of the installation.

Air Force bases were typically constructed with plenty of open space between the base and the local communities.[131] However, since these bases are employment centers for the surrounding communities, nearby land holdings are attractive investments for housing developments, supportive business activities, and service industries.[132] This typically results in the expansion of local communities in the direction of bases. Thus, historically, bases that were once far removed from nearby communities have been

---

[129]AFI 32-7063, *supra* note 12, at ¶ 1.2.3.

[130] *See* AICUZ, *supra* note 128.

[131] *See* Glines, *supra* note 127.

[132] *Siting of HUD Assisted Projects in Runway Clear Zones at Civil Airports and Clear Zones and Accident Potential Zones at Military Airfields*, 49 Fed. Reg. 877 (1984)(to be codified at 24 C.F.R. §51)[hereinafter *Siting of HUD Projects*].

encroached upon by shopping centers, condominiums, industries, schools, hospitals, hotels, and residential areas.

This steady encroachment has often progressed to the point where bases find themselves involved in confrontations with local residents who are concerned with the noise emanating from Air Force bases and potential aircraft accidents. Complaints from local residential and business owners have caused such actions as reduced takeoff weight, restriction of hours of operation, reduction of the number of flights, changes in takeoff and landing patterns, and noise abatement procedures.[133] "This type of action results in declining operating efficiencies which sometimes lead to closure or reduction in mission capability of multimillion dollar installations."[134]

In fact, encroachment by civilian communities has resulted in the cessation of flying operations at a number of bases. For example, during the 1970s and 80s, Chanute, Lowry, Hamilton, and Laredo Air Force Bases all ceased flying operations, in part, as a result of encroachment.[135] Hamilton and Laredo were eventually closed.[136] Lowry and Chanute are being closed under the current rounds of base closure. More recently, the Air Force during the base closure process used current and probable future encroachment as

---

[133] *Id.*

[134] *Id.*

[135] *See* Glines, *supra* note 127.

[136] *Id.*

well as current incompatible development existing in areas covered by AICUZ as factors in considering recommendations for base closure.[137]

B. AICUZ - Planning and Implementation

The AICUZ program makes use of graphic contours placed on a map of the installation and surrounding areas. These maps depict those areas impacted by noise from aircraft and areas within which accidents are most likely to occur [Accident Potential Zone (APZ)]. AICUZ studies also include matrixes of minimum compatible land uses, which are based on the amount of noise and/or the aircraft accident potential of the area. In general, AICUZ plans advise reduced population density in APZs and elimination of noise sensitive activities in areas exposed to maximum overflight activity.

Each Air Force Major Command[138] Civil Engineer (MAJCOM/CE) is given primary responsibility for ensuring that installations prepare and update AICUZ

---

[137] *See* Department of Defense, Base Closure and Realignment Report, *supra* note 5, at Volume V, Department of the Air Force Analyses and Recommendations, p.8. DoD considered eight selection criteria to determine which bases to recommend for closure or realignment. The first four of these criteria were classified as "military value." They consisted of: 1) The current and future mission requirements and the impact on operational readiness of the DoD's total force; 2) The availability and condition of land, facilities and associated airspace at both existing and potential receiving locations; 3) The ability to accommodate contingency, mobilization, and future total force requirements at both existing and potential receiving locations; 4) The cost and manpower implications. These four criteria were given priority consideration by the Commission. (See p. 5-1). The remaining four criteria included: 5) The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs; 6) The economic impact on communities; 7) The ability of both the existing and potential receiving communities' infrastructure to support forces, missions and personnel. In order to evaluate these selection criteria, the Air Force identified 250 sub-elements to be considered. The sub-elements for the second criteria include, in part, existing local community encroachment and future local community encroachment each of which require evaluation of development in each of the AICUZ zones.

[138] A major command is an Air Force command that is established by the authority of, specifically designated by, and directly subordinate to, Headquarters, Department of the Air Force.

studies.[139] Although the data needed for completion of an AICUZ study is collected by base personnel or contractors, MAJCOM/CE gathers, updates, and analyzes installation AICUZ data and certifies its accuracy. At the discretion of MAJCOM/CE, the final AICUZ study is prepared by either MAJCOM/CE, the Air Force Center for Environmental Excellence or a contractor.[140] The Air Force requires that all AICUZ studies be reviewed at least every two years to determine if changes in aircraft or operations require an AICUZ update.[141]

1. Parameters of Concern

When developing an AICUZ plan, there are three areas of overlapping concern that planners must address: obstructions, accident risks, and noise.

a. Obstructions

Obstructions are natural objects, man-made structures, and activities which present safety hazards to takeoff and landing operations because they penetrate into the

---

[139] *See AFI 32-7063, supra* note 12, at ¶ 1.3.4.3.

[140] *Id.*

[141] See *AFI 32-7063, supra* note 12 at ¶ 1.3.5.1, which requires that: "Each MAJCOM/CE and Director of Operations (MAJCOM/DO) reviews AICUZ aircraft operational and maintenance data at least every two years or as part of an Environmental Impact Analysis Process (EIAP) evaluation (per AFPD 32-70, AFI 32-7061, *Environmental Impact Analysis Process* (formerly AFR 19-2), AFI 13-201, *US Air Force Airspace Management* (formerly AFRs 55-2 and 55-34), and AFI 13-213, *Airfield Management* (formerly AFR 55-48), to determine the need for an AICUZ update."

navigable airspace surrounding a base. An object such as a factory smokestack, a powerline, antenna or a tall building may be an obstruction based on its height.[142]

Other forms of obstructions include visible emissions and electronic emissions. For example, a visible emission could result from a factory smokestack that is under the height limitations but emits smoke that reduces visibility in the airspace concerned. Electronic emissions, though invisible, can also be obstructions because they can interfere with the safe operation of and communication with aircraft or set off explosive devices in or being carried by the aircraft.

b. Accident Potential Zones

Another planning consideration is potential accident zones. The Air Force has conducted studies to determine the likely locations of aircraft accidents in the area of Air Force runways.[143] These studies revealed that most accidents occur at the ends of the runway, with the number of accidents decreasing as the distance from the runway increases. The most recent update of the Air Force's accident studies,[144] revealed that

---

[142] *AICUZ, supra* note 128, at § 256.3(b) references the regulatory criteria for determining height restrictions. *See also*, Air Installation Compatible Use Zone Program, Air Force Instruction 32-7063, ¶ 2.2, March 31 1994, which directs that AICUZ study preparers are to use the land area and height restrictions explained in AFI 32-1026, Planning and Design of Air Fields, for determining airspace obstructions. The Federal Aviation Administration's 14 C.F.R., FAR Part 77, Subpart C establishes standards for determining obstructions in navigable airspace.

[143] Bernard K. Schafer, *The Air Installation Compatible Use Zone Program: The Science and the Law*, AIR FORCE L. REV. 165, 166 (1989).

[144] The location and size of APZs was initially determined based on the results of an Air Force study of 369 aircraft mishaps from 1968 to 1972 that occurred within a 10 nautical mile radius of airfields.[144] This study was updated in 1990.[144] There were, however, no changes made to the geographical parameters of APZs as a result of the updated information.

28.1 percent of all the accidents studied occurred in the Clear Zone (CZ),[145] a zone 3000 feet long and wide at both ends of the runway. The next zone, APZ I, [146] measures 5000 feet long and 3000 feet wide and accounts for 10.4 percent of all the accidents. APZ II,[147] an area 7000 feet long and 3000 feet wide, accounts for 5.6 percent of the accidents studied. The statistics also revealed that 24.7 percent of the accidents occurred on the runway; and 31.2 percent occurred outside the runway, CZ, and APZs, but within a 10 nautical mile radius of the airfield. APZs (which include the CZ) are based on accident data collected and accumulated at the DoD level and do not reflect the actual accident patterns occurring at the individual installation preparing an AICUZ study.[148]

As a result of these studies, the boundaries of the CZ, APZ I and APZ II have become formalized as the accident potential zones within which development should be discouraged.[149] Referring to these areas, 32 C.F.R. 256.3(c) states that:

---

[145] The area immediately beyond the end of a runway is the "Clear Zone," an area which possesses a high potential for accidents, and has traditionally been acquired by the Government in fee and kept clear of obstructions to flight. *See* 32 C.F.R. §256.3(c)(2)(i).

[146] Accident Potential Zone I is the area beyond the clear zone which possesses a significant potential for accidents. *See* 32 C.F.R. § 256.3(c)(2)(ii).

[147] Accident Potential Zone II is the area beyond APZ I having a measurable potential for accidents. *See* 32 C.F.R. § 256.3(c)(2)(iii).

[148] Schafer, *supra* note 143, at 170.

[149] The location and size of an APZ depends on whether the runway is Class A or B. The only class A runway currently operated by the Air Fore is at Patrick AFB, Fl. *See AICUZ, supra*, note 128, at § 256.3(c). DoD Fixed wing runways are separated into two types for the purpose of defining accident potential areas. Class A runways are those restricted to light aircraft (See @256.6) and which do not have the potential for development for heavy or high performance aircraft use or for which no foreseeable requirement for such use exists. Typically these runways have less than 10% of their operations involving Class B aircraft (@256.6) and are less than 8000 feet long. Class B runways are all other fixed wing runways. As for class A runways, the dimensions of these zones were reduced to reflect the equally reduced size and danger of the aircraft operating there. As a result, for Class A runways, the CZ is 3000 feet long, but only 1000 feet wide; APZ 1 is 2500 feet long and 1000 feet wide; and APZ II is 2500 feet long and 1000 feet wide. *See* Schafer, *supra* note 143, at 170.

> Areas immediately beyond the ends of runways and along primary flight paths are subject to more aircraft accidents than other areas. For this reason, these areas should remain undeveloped, or if developed should be only sparsely developed in order to limit, as much a possible, the adverse effects of a possible aircraft accident.

In order to limit development in the most dangerous of these areas, the CZ, the DoD policy establishes as a first priority "the acquisition in fee and/or appropriate restrictive easements of lands within the clear zones whenever practicable."[150] As for APZ I and APZ II, the DoD policy is to acquire these areas "only when all possibilities of achieving compatible use zoning, or similar protection, have been exhausted and the operational integrity of the air installation is manifestly threatened."[151] In addition, only the minimum property interest needed to protect the Government is to be acquired.[152]

In order to assist local governments in making land use decisions, DoD has developed "Land Use Compatibility Guidelines for Accident Potential"[153] (Attachment 1) which categorize possible land uses as compatible or incompatible with the CZ, APZ I or APZ II. These guidelines are included in the final AICUZ document. Only very limited forms of development, (e.g., railroads and two lane highways) are allowed in the clear zone. Generally, residential development is incompatible in the CZ or APZ I. Single

---

[150] *AICUZ, supra* note 128, at § 256.4(b)(2)(ii)(A).

[151] *Id.* at § 256.4(b)(2)(ii)(B).

[152] *Id.* at § 256.4.

[153] *AICUZ, supra* note 128, at § 256.8.

family dwellings, however, may be compatible in APZ II subject to any necessary noise abatement procedures.

c. Noise Contours

The third parameter of consideration in AICUZ development is the impact of aircraft noise on the areas surrounding the installation. The Department of Housing and Urban Development (HUD) has determined that noise is a major source of environmental pollution which represents a threat to the serenity and quality of life in population centers and that noise exposure is a cause of adverse physiological and psychological effects as well as economic losses.[154]

On a physiological level, temporary shifts in hearing thresholds and sleep loss have been documented.[155] Studies have also implicated noise as a factor producing stress-related health effects such as heart disease, high-blood pressure, and ulcers.[156]

"On a behavioral level, interruptions in human activities occur, such as work or speech, that result in greater stress"[157] have been documented. The scientific evidence on

---

[154] Environmental Criteria and Standards, 24 C.F.R. §51.100 (1979).

[155] *See* Schafer, *supra* note 143, at 172.

[156] Guidelines for Considering Noise in Land Use Planning and Control, Federal Interagency Committee on Urban Noise, Table D-1, Note (1980)[hereinafter *Guidelines*].

[157] Schafer, *supra* note 143, at 172.

noise impacts clearly points to noise as not simply a nuisance but as an important health and welfare concern.[158]

Studies conducted on the impacts of noise, however, often assess the impacts of noise based on annoyance. For example, studies on the effects of noise on people in residential areas have revealed significant, severe, and very severe annoyance in areas of day-night average (Ldn) decibel (dB) levels of 65, 70, and 75 dB, respectively.[159] To determine the extent of the noise generated at DoD air installations, the amount and location of noise surrounding an airfield is computed using the Ldn method,[160] a method recommended by the Environmental Protection Agency.[161] Ldn is the yearly day-night sound level in decibels and results from the yearly average of daily traffic and use of runways and flight paths. It measures ambient noise including aircraft noise and other noises within the same community setting and imposes a penalty for nighttime (10 P.M. - 7 A.M.) operations, the duration of noise events, and aircraft noise that is above the ambient background level.[162] It measures noise in terms of decibels.[163]

In response to concerns regarding the impacts of noise, the Federal Interagency Committee on Urban Noise was established in 1979 to coordinate various federal

---

[158] *Guidelines, supra* note 156, at 1.

[159] *Id.* at Table D-1.

[160] Schafer, *supra* note 143, at 172.

[161] *Id.*

[162] *See* J. Scott Hamilton, *Allocation of Airspace as a Scarce National Resource*, 22 TRANSP. L. J. 251, 260 (1994).

[163] *Id.*

programs, including an "interagency program designed to encourage noise sensitive development, such as housing, to be located away from major noise sources."[164] The Committee members included the Environmental Protection Agency, DoD, Department of Transportation (DoT), Housing and Urban Development (HUD), and the Veterans Administration (VA).

In June, 1980, the Committee published the *Guidelines for Considering Noise in Land Use Planning and Control* (Noise Guidelines). These guidelines attempt to orchestrate the activities of the major federal agencies and their programs that are either sources of noise (e.g. DoD and DoT) or sources of noise sensitive development (e.g. HUD and VA). These Noise Guidelines contain a list of land use compatibility guidelines based on noise zones.(Attachment 2) Land use compatibility is expressed as being "compatible, "compatible with restrictions and "incompatible"[165] For example, virtually all forms of development are compatible with noise levels below 65 Ldn. Levels of 66 Ldn to 75 Ldn, with certain restrictions, are compatible with most forms of development. Levels of 76 to 85 are not compatible with most types of development that involve residential uses or access by the general public. Very few forms of development are compatible with noise levels above 85 Ldn.

The first step in defining the noise aspect of an AICUZ study is data collection. Installation personnel or a contractor collect data regarding a wide range of activities

---

[164] *Guidelines, supra* note 156 at iii.

[165] *Id.* at Table D-2.

including the type of aircraft, number of flights, flight tracks, time of day, atmospheric conditions and ground operations. At MAJCOM/CE's discretion, all of this data is then submitted to, the Air Force Center for Environmental Excellence (AFCEE/DGP), Brooks AFB, Texas; a contractor; or MAJCOM/CE for preparation of a noise contour map.[166] At a minimum, contours for Ldn 65, 70, 75, and 80 must be plotted on maps as part of the AICUZ study.[167]

The noise contour maps in conjunction with the APZs form the basis to determine what type of development is compatible with flying operations in the areas surrounding the base. In areas where the noise and accident areas overlap, the more stringent guideline is applied.[168]

2. AICUZ Implementation - Coordination with Local Authorities

The AICUZ program objective is to "assist local, regional, state, and federal officials in protecting and promoting the public health, safety, and welfare by promoting compatible development within the AICUZ area of influence."[169] Similarly, "DoD

---

[166] *See AFI 32-7063, supra* note 12, at ¶ 1.3.4.3. The noise contour maps are generated by placing the data related to a specific base into a standard computer model.

[167] *AICUZ, supra* note 128, at § 256.3(d)(2)(i). *See also, AFI* 32-7063, *supra* at note 113, at ¶ 2.4.

[168] Telephone Interview with John Baie, Program Manager, Air Force Environmental Planning Division (HQ USAF/CEVP) (May 29, 1996).

[169] *AFI* 32-7063, *supra* note 12, at ¶ 1.2.3.

policy is to work toward achieving compatibility between air installations and neighboring civilian communities by means of a compatible land use planning and control process conducted by the local community."[170] Federal Management Circular 75-2, *Compatible Land Uses at Federal Air* Fields,[171] provides that:

> Operating agencies shall develop procedures for coordinating airfield plans with the land use planning and regulatory agencies in the area. Developing compatible land use plans may require working with local governments, local planning commissions, special purpose districts, regional planning agencies, state agencies, as well as other regional, and state agencies to assist them in developing their land use planning and regulatory processes, to explain an airfield plan and its implications, and to generally work towards compatible planning and development in the area of the airfield.

Thus, the AICUZ program is implemented through the local government's powers over land use, planning, zoning ordinances and building codes. The air installation gives the AICUZ study to the local community planners[172] and encourages them to incorporate the recommendations into the overall local land use planning process and into their comprehensive plan, if they have one.

The publication of the AICUZ plan by itself has no legal effect; but the Air Force, as an interested landowner, is entitled to participate in the local zoning process and to

---

[170] *AICUZ, supra* note 128, at § 256.4(b)(1)(i)

[171] Compatible Land Uses at Federal Airfields, Federal Management Circular 75-2, September 30, 1975.

[172] See *AFI 32-7063, supra* note 12, at ¶ 1.3.4.3. "MAJCOM/CE releases the installation AICUZ update study in a public meeting with local and areawide officials. HQ USAF/CEV coordinates with the congressional delegations (before public release) and federal officials (after public release) in Washington D.C." The Air Force Center for Environmental Excellence, Regional Compliance Office "coordinates the study with federal regional offices after public release. The MAJCOM/CE ensures coordination of the study with the Executive Order (EO) 12372, Interagency Review of Federal Programs, state single point of contact immediately after public release."

attempt to persuade the local government to accept its recommendations.[173] The Air Force's goal, however, is that the Air Force not have to "sell" the program, but that AICUZ be a cooperative, information and assistance program.[174]

To assess the effectiveness of an AICUZ study, the Air Force requires that a review be conducted every two years to determine in detail how the local government has used the most recent AICUZ study recommendations. The review contains a thorough analysis of the successes, actions and policies by local communities to implement the AICUZ study recommendations. This review, at a minimum, includes a review and synopsis of all affected local government comprehensive land use plans, development plans, zoning plans, zoning maps and ordinances. It also includes transportation plans, subdivision plots, and other proposals within the airfield area pertinent to the AICUZ study.

If the Air Force discovers that AICUZ development guidelines are not being properly implemented, the Air Force has no direct means of requiring implementation. There are, however, several limited checks on local communities that fail to incorporate an AICUZ study into local planning. "The Noise Guidelines evidence both HUD's and VA's intention to follow DoD's accident potential zones, and noise contour studies."[175] HUD and the VA, therefore, refuse to provide assistance for construction within accident

---

[173] *See* De-Tom, Inc. v. United States, 552 F. 2d 337 (Ct. Cl. 1977).

[174] HQ USAF/PRE Letter to all command judge advocates, November 1974.

[175] Schafer, *supra* note 143, at 178.

potential zones, and noise contour areas 65 Ldn and higher.[176] Federal agencies can also formally oppose inconsistent sitings through local zoning boards or other regulatory agencies (e.g. FAA, FCC).

C. Fifth Amendment Takings Claims Resulting From AICUZ

1. Applicability of Lucas

Landowners whose lands are zoned by local authorities based on an AICUZ study may have a claim against the zoning authority for a regulatory taking under the Fifth Amendment. The proper test to apply to determine if such a taking has occurred is the analysis articulated by the Supreme Court in *Lucas*. As discussed above, the Court must first examine the owner's estate to determine if the proscribed use interest was originally part of the title.[177] If the interest was part of the owner's title, then the court addresses the question of whether the regulation of the land affects a *per se* confiscatory taking of the land. If it does not, then the Court applies the *Penn Central* tripartite analysis to determine if a taking has occurred. Historically, however, the court has presumed zoning ordinances to be valid unless the plaintiff can show them to be arbitrary, unreasonable and lacking a substantial relationship to public health, safety, morals or welfare.[178] Generally, if the land can economically be used for some purpose, then a taking will not be found.[179]

---

[176] *See*, *Siting of HUD Projects*, *supra* note 132. There is, however, a limited exception to this policy if noise attenuation construction techniques are used to reduce decibel levels. *See supra* note 163 and accompanying text for an explanation of Ldn.

[177] Lucas, 505 U.S. at 1027.

[178] *See* Nectow v. City of Cambridge, 277 U.S. 183 (1928).

In some circumstances, a local zoning authority may require a developer to give land or an easement to the local government. The courts have generally held that there must be a nexus between the proposed development and the dedication of land or exaction. For example, the developer may be required to give land for a park or a school site to fulfill the need crated by his development and for the benefit of the development. However, if that nexus is not present, a local government may not require a property owner to give a property interest without compensation as a condition for a rezoning or building permit.[180]

---

[179] *See* Hadacheck v. Sebastian, 239 U.S. 394 (1915), in which the Supreme Court upheld an ordinance that prohibited the operation of a brickyard in residential neighborhoods. The effect of the ordinance was a dramatic reduction of the value of plaintiff's property. The court held there was no taking, even though the plaintiff's brick yard pre-dated the residential neighborhood–thus the plaintiff received no compensation.

[180] *See* Nollan v. California Coastal Commission, 483 U.S. 825 (1987). In *Nollan*, the California Coastal Commission granted a permit to appellants to replace a small bungalow on their beach front lot with a larger house upon the condition that they allow the public an easement to pass across their beach, which was located between two public beaches. The court found that although the outright taking of an uncompensated, permanent, public-access easement would violate the Takings Clause, conditioning appellants' rebuilding permit on their granting such an easement would be lawful land-use regulation if it substantially furthered governmental purposes that would justify denial of the permit. The government's power to forbid particular land uses in order to advance some legitimate police power purpose includes the power to condition such use upon some concession by the owner, even a concession of property rights, as long as the condition furthers the same governmental purpose advanced as justification for prohibiting the use. In *Nollan,* the court found that none of the State's justifications for requiring the easement were plausible. The State had argued that the easement was necessary: to protect the public's ability to see the beach; to assist the public in overcoming a perceived "psychological barrier to using the beach; and to prevent beach congestion. *See also* Dolan v. City of Tigard. In *Dolan*, the plaintiff challenged the decision of the Oregon Supreme Court which held that the City of Tigard could condition the approval of her building permit on the dedication of a portion of her property for flood plain control and for a pedestrian/ bicycle pathway. The court in *Dolan* found that the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development. The court called this a "rough proportionality" test. The court found that the first issue to be determined is whether the essential nexus exists between the legitimate state interest and the permit condition exacted by the city. The second part of the analysis requires a determination whether the degree of the exaction demanded by the city's permit conditions bear the required relationship to the projected impact on petitioners proposed development. The court found that the cities justifications did not show the required reasonable relationship between the floodplain easement and the petitioner's proposed new building. The case was remanded for further proceedings consistent with the court's opinion.

2. Air Force Liability for Local Government Zoning Decisions- De-Tom Enterprises, Inc v. United States

Landowners not only bring suit against the local zoning authority, but on occasion they also file suit against the Air Force alleging inverse condemnation. In such a case, the landowner usually argues that the Air Force in its attempts to have its AICUZ study implemented exerted undue influence over the local zoning authority. *De-Tom Enterprises, Inc. v. United States* is an example of such a case.[181] In *De-Tom,* the plaintiff argued that the United States should be held liable for a taking of its property because the Air Force influenced Riverside County, California, to refrain from changing the zoning of an area based on recommendations set out in the AICUZ report from nearby March AFB. De-Tom's argument was that the Air Force prevented the company from obtaining a change of zoning that would have permitted the property to be developed for high density residential purposes.[182] De-Tom petitioned the Riverside County Board of Supervisors for a change of zoning for the property from that designating the land as residential/agricultrual to residential/single-family dwellings.[183] The County Planning Commission and the local Airports Land use Commission approved the application, but the Riverside County Board of Supervisors denied De-Tom's request to rezone the area.[184]

---

[181] De-Tom Enterprises, Inv. v. United States, 552 Fd 337 (Ct. Cl. 1977).

[182] *Id.* at 341.

[183] *Id.*

[184] *Id.*

The only property owner to appear before the Board of Supervisors to voice opposition to the rezoning was the Untied States Air Force, represented by the Staff Judge Advocate (SJA) from March AFB.[185] The SJA reminded the Board of the large amounts of money invested by the Air Force in the base itself, and of the millions spent on operations at the base. He noted that if the area adjacent to the base were to be developed for high-density residential use, complaints about noise might compel the Air Force to curtail, or even discontinue, operations at the base.[186] The March AFB commander also submitted a letter to the Board of Supervisors expressing the view that because of the high level of noise at that end of the base, the property adjacent to it would be "highly undesirable for any type of residential use."[187]

The Court found that: "If plaintiff's position is that the Air Force necessarily took plaintiff's property (in the constitutional sense) simply by persuading the County board not to change the zoning of the property, we must reject such a claim on its merits."[188] Contrasting the case with a situation in which the Government has taken land through its own extensive or intrusive regulatory activity, the court found that:

> [I]t is quite different when neither Congress nor a federal agency puts any regulatory burden on the owner but the agency, as an interested landowner, does no more than convince a state or local agency to impose such a burden, in the same way as might any other neighboring property owner or citizen. Here the Air Force was a powerful adjoining landholder, but so could be a large private

---

[185] *Id.*

[186] *Id.*

[187] *Id.*

[188] *Id.* at 339.

> manufacturer or comparable enterprise, or an organized group of citizens intent on preserving the environment or the character of their locality. In none of these cases would the intervention of the neighbor to persuade a county entity against rezoning the claimant's land constitute an eminent domain taking by the neighbor-whatever else it might be. The United States is thought to be a deep pocket and it is tempting for owners to try to shift to it the cost which they cannot or do not wish to impose on the local entity which actually undertakes the zoning, but the fundamental point is that it is that agency (here the County Board) which adopts, and has the power to adopt, the allegedly injurious course, and the federal agency (here the Air Force) is only playing the role of an influential affected landowner trying to persuade the county body to accept its position.[189]

As a result of this case and others like it, it is well established that the Air Force can participate in local land use proceedings and stands in the position of any other landowner who attempts to persuade the local legislative body to regulate land uses in a manner which is consistent with his use of the land.[190] As long as there has been no overreaching or improper conduct, such as, denying a property owner the due process of a zoning hearing by entering into an outcome influencing memorandum of understanding with the county before a zoning hearing is held, plaintiffs are generally unsuccessful.[191]

---

[189] *Id.* at 339-340.

[190] *See* Blue v. United States, 21 Cl. Ct. 359 (1991); De-Tom Enterprises v. United States, 552 F.2d 337, 339 (Ct. Cl. 1977); Lynch v. Untied States, 221 Ct. Cl. 979, 981 (1979); Nalder v. United States, 217 Ct. Cl. 686 (1978); Gilliland v. United States, 215 Ct. Cl. 953 (1977).

[191] *See* Gilliland v. United States, 228 Ct. Cl. 709 (1981) In *Gilliland*, the plaintiffs owned a 33 acre tract close to an Air Force Base near Palmdale, California, known as plant 42. The court found that although the Air Force strenuously objected to the plaintiffs' applications in 1973 to the authorities in the county of Los Angeles and the City of Palmdale for a rezoning from agricultural to commercial, no improprieties were shown. *See also* NBH Land Co. v. United States, 576 F.2d 317 (Ct. Cl. 1978). In *NBH Land Co.*, the plaintiffs claimed that announced plans by the Army to expand Fort Carson, Colorado, by acquiring plaintiffs' land and the Army's public opposition to zoning changes which would allow the plaintiffs to develop their lands as a private subdivision amounted to a taking of their land. The court found that "use and exploitation of local zoning along with other acts and omissions, can make up a combination that, all taken together, effectively deprives the owner of the benefit and use of his property, and constitutes a taking." However, the court found that the Army's actions did not rise to this level. Thus, no taking was found to have occurred. The court stressed that the fact that the plans to expand the Fort had been abandoned as a result of Congress' refusal to fund the project.

On a few occasions, however, federal agencies have been held liable where they have gone beyond mere participation in the zoning process and taken affirmative egregious steps to lower property values.[192]

3. Air Force Liability for Publication of AICUZ Studies

In some cases, plaintiff's base their claims on a theory that publication of AICUZ study data itself accomplishes a denial of their property rights under the Fifth Amendment. AICUZ studies, however, are planning efforts and do not control or regulate the use of private lands. In *Stephens v. United States*[193] the court recognized that AICUZ studies are "advisory only" and that the authority to permit or restrict development or use of private lands is left to the local jurisdiction. Other courts have specifically held that the publication and dissemination of AICUZ plans did not violate private landowner's Fifth Amendment rights.[194] In such cases the plaintiffs cannot seriously dispute the advisory nature of an AICUZ study or any of the study elements.

---

[192] *See* Drakes Bay Land Co. v. United States, 424 F.2d 574 (Ct. Cl. 1970). In this case, the plaintiff, a corporation, purchased a tract of land in 1960 with the intention of subdividing it. In November 1962, legislation was passed which authorized the National Park Service (NPS) to acquire lands for the creation of the Point Reyes National Seashore. The legislation specifically set out the metes and bounds for the seashore which included the plaintiff's land. The NPS, however, took no action to acquire the property. The court found that where " Congress authorized the acquisition of lands by purchase, exchange or otherwise to create a national seashore and where the government refused to purchase plaintiff's land contrary to the intent of the Act, the government effectively acquired the use of the land without payment, and must pay just compensation."

[193] Stephens v. United States, 11 Cl. Ct. 352, 363 (1986). In *Stephens*, the plaintiff alleged that overflights from nearby Hill AFB had resulted in a taking of his land. In determining that there was no taking, the court examined the noise impacts on the plaintiff's land as recorded in the base's AICUZ study. In discussing the impacts of an AICUZ study, the court noted that: "The reports are advisory only, and the determination to build is ultimately left to the local jurisdiction."

Obviously, the noise study itself does not zone or regulate land. It is merely part of the AICUZ planning document that contains the Air Force's recommendation to state and local land use planning authorities for compatible land uses around the installation that state and local land use planning officials are free to disregard or voluntarily adopt in whole or in part.

In *Branning*, discussed previously,[195] the court in its analysis of the nature and purpose of the AICUZ program, found that:

> The Air Installation Compatible Use Zone Program has been instituted in an effort to coordinate the requirements of the missions of military air installations, with the development of the surrounding communities. The AICUZ is a concept of identifying compatible and incompatible land use around an air station, the purpose being to guide compatible private development through the cooperation with local jurisdictions in order to minimize public exposure to aircraft noise and accident potential, while at the same time maintaining the operational capability of the station.[196]

Although the court in *Branning* found that the manner, frequency and number of Marine Corps aircraft flights over plaintiff's land did constitute a taking, it specifically held that publication of the AICUZ study, in and of itself, was not sufficient to violate plaintiff's Fifth Amendment rights.[197]

The treatment of AICUZ studies in these cases is consistent with the treatment of Fifth Amendment claims in cases based on other planning efforts. Courts have had

---

[194] *See,* Branning v. United States, 654 F.2d 88 (Ct. Cl., 1981).

[195] *Supra* notes 71-82 and accompanying text.

[196] *Id.* at 95.

[197] *Id.* at 96.

frequent occasion to consider whether the publication of a local government's comprehensive plan, an acquisition plan, a proposed condemnation plan, or an urban renewal plan, by itself, constitutes a taking. Although private property may suffer a diminution in value as a result of the publication of these planning efforts, courts have routinely recognized the importance of informing the public of proposed projects and have refused to find that the publication of such plans by themselves constitutes a taking.[198]

D. Potential Impact of AICUZ Studies in Overflight Takings Cases

Although an AICUZ study does not, in and of itself constitute a taking, courts have allowed AICUZ information to be used as evidence to prove the last two elements of the *Causby* test. Although the *Branning* decision is considered to be the exception to the rule that flights above 500 feet are not compensable, the case also raised the issue of AICUZ studies as evidence in an overflight taking case. In *Branning*, the plaintiff asserted that flights by Marine Corps aircraft over its land reduced or destroyed the value of the property for its highest and best use, namely, for single family residential use and development as provided in plaintiff's master plan for development of its lands. In support of its position the plaintiff relied on AICUZ studies published by the Marine Corps. These studies established that portions of the plaintiff's land had been listed as

---

[198] *See* Mesa Ranch partnership v. United States, 2 Cl. Ct. 700 (1983); Sayre v. United States, 282 F. Supp. 175 (N.D. Ohio, 1967); NBH Land Co. v. United States, 576 F.2d 317 (Ct. Cl. 1979); Barsky v. City of Wilmington, 578 F. Supp. 170, 174 (D. Del., 1983).

"clearly unacceptable"[199] for low, medium, or high density residential use as a consequence of aircraft overflights. Other portions of the plaintiff's property had been declared "normally unacceptable"[200] for residential use.

The court held that the information in the AICUZ study

> "is not, in and of itself, sufficient to establish a taking of plaintiff's property by the defendant. It does, however, constitute valuable evidence of the impact of defendant's aircraft operations on that part of plaintiffs property over which defendant's A-4 and F-4 jet aircraft were operating."[201]

The court also held in its listing of ultimate facts that:

> Defendant has not only intruded upon plaintiff's property but has also given public notice of the adverse effect thereof upon plaintiff's property by adopting, publishing, and approving for implementation the AICUZ study of 1976 in which at least part of plaintiff's property has been designated as unsuitable or unacceptable for medium density housing.[202]

Based on this holding, it would appear that plaintiff's in overflight cases may use an AICUZ study to prove the last two prongs of the *Causby* test; that is, that the flights directly and immediately interfered with the claimant's enjoyment and use of the land, and that the interference was substantial.

Although the AICUZ study was permitted as evidence supporting plaintiff's claim in *Branning*, the purpose of the AICUZ program, to achieve compatible use of

---

[199] Branning, 654 F. 2d at 92, Note 4: Clearly Unacceptable - The noise exposure at the site is so severe that construction costs to make indoor environment acceptable for performance of activities would be prohibitive. (Residential areas: The outdoor environment would be intolerable for normal residential use).

[200] *Id.*, Note 5: Normally unacceptable - The noise exposure is significantly more severe so that unusual and costly building constructions are necessary to insure adequate performance of activities.

[201] *Id.* at 96.

[202] *Id.*

public and private lands, is not served by permitting introduction of the AICUZ as evidence against the government in litigation. In fact, some have argued that as a result of the *Branning* court's reliance on the AICUZ study to find a taking occurred, the DoD should seek an exclusionary rule prohibiting the use of AICUZ studies in litigation against the United States.[203] Such an exclusionary rule, however, would probably have very little impact on the outcome of overflight takings cases. It is likely that in most cases, where an AICUZ study categorizes lands as unacceptable for residential development because of noise, the plaintiff's would be able to produce sufficient evidence of substantial interference with the use of land for residential purposes without relying on AICUZ data.

While AICUZ studies have the potential to be used as evidence against the United States to prove a taking due to overflights, they can also serve to reduce potential overflight takings cases when they are used in the zoning process. Zoning pursuant to AICUZ should limit land uses that are incompatible with the noise generated from overflying aircraft. This in turn limits uses of land to those that would not normally be disturbed by overflying aircraft.

---

[203] *See,* Charles W. Gittins, *Branning v. United States: The Sound of Freedom or Inverse Condemnation*, NAVAL L. REV., 109, (Winter, 1986).

E. Acquiring Property Interests as a Result of AICUZ or Overflights

As mentioned above, with the exception of the CZ,[204] the Air Force policy is generally not to acquire property interests in land.[205] DoD guidance allows for the acquisition of lands in APZ I and APZ II and in high noise areas, but "only when all possibilities of achieving compatible use zoning, or similar protection, have been exhausted and the operational integrity of the air installation is manifestly threatened."[206] In addition, under DoD policy only the minimum property interest needed to protect the Government is to be acquired.[207] DoD guidance also cautions that "the acquisition of property rights on the basis of noise. . . may not be in the long term interest of the United States."[208] When it is determined to be necessary for the government to acquire interest in land, the interest acquired is not necessarily a fee simple interest. For example, it may only be necessary to acquire an easement to make low and frequent flights over said land and to generate noise.[209]

---

[204] *AFI* 32-7063, *supra* note 12, at ¶ 4.1, states that "MAJCOM/CE must acquire real property interest over all property within the clear zone. . . . The only real property interests acquired are those necessary to prevent incompatible land use in the end-of-runway clear zone. MAJCOM/CE is responsible for identifying private lands within the clear zone, for determining the real property interests in accordance with AFI 32-9001, Acquisition of Real Property."

[205] *AICUZ, supra* note 128, at § 256.4(b)(iii)(d)(1) states that: "Any actions taken with respect to safety of flight, accident hazard, or noise which involve acquisition of interests in land must be examined to determine the necessity of preparing an environmental impact statement in accordance with DoD Directive 6050.1, Environmental Considerations in DoD Actions, March 19, 1974(32 CFR part 214)."

[206] *Id.* at § 256.4(b)(2)(ii)(B).

[207] *Id.* at § 256.4.

[208] *Id.* at § 256.4(b)(2)(i).

[209] *Id.* at § 256.9 contains a listing of possible interests which should be examined for applicability.

The Military's ability to acquire real property not currently owned by the United States is generally prohibited unless the acquisition is specifically authorized by law,[210] as such an acquisition of a real property interest normally requires authorization and appropriation by Congress. This is generally accomplished as part of the military construction process.[211]

There is, however, one notable exception to this rule that is occasionally used to acquire land within an APZ or land affected by overflights. 10 U.S.C. §2672 provides that: "The Secretary of a military department may acquire any interest in land that the Secretary determines is needed in the interest of national defense; does not cost more than $200,000, exclusive of administrative costs and the amounts of any deficiency judgments." The funds used to acquire lands under this authority come from the military department's operating and maintenance funds. Although used sparingly, this authority gives the Air Force the flexibility within its prescribed limits to deal with unique situations that may arise. For example, Altus AFB, OK, recently began flying operations on a newly constructed runway. After flying operations began on the runway, a nearby landowner began complaining about the flights of the Air Force's C-5, C-141, and KC-135 aircraft which passed some 385-415 feet over his residence. Because the flights satisfied the requirements for a taking under the *Causby* test, the Air Force purchased the

---

[210] *See* 10 U.S.C. §2676 (1996).

[211] This limitation, however, does not apply "to the acceptance by a military department of real property acquired under the authority of the Administrator General Services to acquire property by the exchange of Government property pursuant to the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 471 et seq.)."

property in order to avoid the cost of litigation.[212] In this case, the Air Force is relying on the authority contained in 10 U.S.C. §2672 to purchase these lands. However, the Air Force is currently only exercising this discretion when it is faced with serious litigation jeopardy involving overflights of residential structures. In cases involving vacant lands, the Air Force continues to apply its policy of requiring landowners to prove their case in court.[213]

VI. Potential Impacts of Pending Takings Legislation on the Air Force's Liability for Overflight Takings and AICUZ Implementation

Proposed legislation in both the United States Senate and House of Representatives threatens to radically change the law relating to takings under the Fifth Amendment. The legislation if passed could greatly increase the Air Force's liability for takings alleged as the result of the publication of AICUZ studies and as a result of aircraft overflights. Two bills (S.605 and H.R. 925) are currently receiving the attention of Congress.

A. Proposed Legislation in the Senate - S. 605

S. 605, approved on December 21, 1995, by the Senate Judiciary Committee, but yet to make it to the Senate floor for a vote, would substantially change the way takings

---

[212] Telephone Interview with Ronald A. Forcier, Chief, Real Property Branch, Air Force Legal Services Agency, Environmental Litigation Division (May 3, 1996).

[213] *Id.*

cases are decided; thus, it is controversial. The bill is based on the premise that the Federal Government has unfairly burdened property owners in violation of the Fifth Amendment and that the fact specific approach to takings issues currently used by the courts is ineffective and costly.[214] The bill's stated purpose is to establish new takings claims and procedures to protect property rights, clarify jurisdiction, and minimize, "to the greatest extent possible," the taking of private property.[215] The primary means of accomplishing the bill's purpose is its requirement that an agency pay compensation whenever its action reduces the value of the affected portion of property subject to the action by 33 percent or more.[216] This provision would essentially reverse the current judicial test which requires a substantial reduction in the value of the parcel as a whole before a taking can be found to have occurred.[217]

S. 605 also attempts to codify a broad reading of several Supreme Court rulings affecting property rights. For example, the bill's requirement that a property owner receive compensation if agency action "does not substantiality advance the stated governmental interest to be achieved by the legislation or regulation on which the action is based"[218] is an attempt to codify the court's holding in *Nollan v. California Coastal*

---

[214] S. 605, 104th Cong., 1st Sess. §1 (1995).

[215] *Id.* at § 102

[216] Id. at § 204(a)(2)(D).

[217] *See* Penn Central Transportation Company v. New York City, 438 U.S. 104 (1978); Deltona v. United States, 657 F. 2d 1184 (1981); Ciampitti v. United States, 22 Cl. Ct. 310 (1991).

[218] S. 605, *supra* note 214, at § 204(a)(2)(A).

Commission.[219] In addition, the bill's requirement that "agency action which exacts a right to use property as a condition of a permit, license, or other action without a 'rough proportionality' between the need for the dedication and the impact of the proposed use of property must result in compensation"[220] is an attempt to codify the court's holding in *Dolan v. City of Tigard.*[221] Similarly, the bill attempts to codify the court's decision in *Lucas* by requiring compensation for any agency action which deprives the owner, "temporarily or permanently, of substantially all productive use of the property unless the limitation inheres in the property title itself."[222] Under each of these tests the Government would have the burden of proof.[223]

The bill creates one exception. No compensation is required where the proposed land use is a nuisance under state law.[224] Once again, however, the Government has the burden of proof of proving that the use is a nuisance.

S. 605 also expands the federal government's liability for takings by making federal agencies vicariously liable for actions by state and local agencies that receive federal funds or implement federal programs, where the state action or federal funding is

---

[219] Nollan v. California Coastal Commission, 483 U.S. 825 (1987). For a discussion of *Nollan*, *see supra* note 187.

[220] S. 605, *supra* note 214, at § 204(a)(2)(B).

[221] Dolan v. City of Tigard, 14 S. Ct. 2309 (1994). For a discussion of *Dolan*, *see supra* note 187.

[222] S. 605, *supra* note 214, at § 204(a)(2)(C).

[223] *Id.* at § 204(c).

[224] *Id.* at § 204(d).

"directly related" to the statutory taking.[225] In addition, the bill indirectly attempts to limit agency action by requiring that all compensation for takings of property be paid by the agency out of its "currently available appropriations supporting the activities giving rise to the claims for compensation."[226] This would be a significant change since judgments against federal agencies for inverse condemnation are currently paid out of the judgment fund.[227]

The Senate's proposed legislation would significantly alter the jurisdiction of the Court of Federal Claims which currently only has "jurisdiction to render judgment upon any claim against the United States founded either upon the Constitution, or any Act of Congress or any regulation of an executive department, or upon any express or implied contract with the United States, or for liquidated or unliquidated damages in cases not sounding in tort."[228] S. 605 expands the jurisdiction of the Court of Federal Claims to include "invalidation of any act of Congress or any regulation of an executive department that adversely affects private property rights in violation of the Fifth Amendment of the United States Constitution."[229] It also gives the court the power to "grant injunctive and

---

[225] *Id.* at §§ 203(6) and 204. For example, if a state that has been granted authority by EPA to assume administration of the Clean Water Act's §404 wetland permitting process refuses to grant a permit to fill a wetland and a taking is found to have occurred, the EPA would be vicariously liable for the taking.

[226] *Id.* at § 204(f).

[227] 31 USCS § 1304 contains the statutory authority for the creation of the judgment fund. This provision established a permanent appropriation to provide for prompt payment of judgments against the United States and thereby eliminate or reduce the costs of interests. *See* United States v. Varner, 400 F. 2d. 369 (1968).

[228] Tucker Act, 28 U.S.C. §1491(a)(1).

[229] S.605, *supra* note 214, at § 205.

declaratory relief when appropriate"[230] as well as bestowing ancillary jurisdiction over tort claims.[231] These expanded powers grant to the Court of Federal Claims, an Article I court,[232] prerogatives traditionally limited to use by Article III courts.[233] This has caused the Justice Department to question the constitutionality of the proposal.[234]

In lieu of litigating a claim for compensation, the proposed legislation provides for use of alternate dispute resolution with the consent of all the parties.[235] The procedures to be used are those used by the American Arbitration Association.[236] Appeal from arbitration would be to the U.S. District Court or Court of Federal Claims.[237]

In addition, Title IV of the Act would place burdensome new requirements on federal agencies. First, it prohibits the promulgation of a final rule if enforcement of the rule could reasonably be construed to require an uncompensated taking of private

---

[230] *Id.*

[231] *Id.*

[232] Article 1 courts are those created by Congress with the authority granted by the "necessary and proper" clause of Article I of the Constitution. U.S. Const. Art. I, cl. 8.

[233] Article III courts include the United States Supreme Court and "such inferior Courts as Congress may from time to time ordain and establish." U.S. Const. art. III, cl. 1.

[234] Statement of John R. Schmidt Associate Attorney General, Criminal Division, Before the Committee on the Environment and Public Works, United States Senate, Concerning Takings Legislation, 32 (June 27, 1995). "We believe this radical expansion of the CFC's [Court of Federal Claims]authority raises serious constitutional concerns. Briefly put, these provisions plainly implicate Article III of the Constitution, which provides that '[t]he judicial power of the United States, shall be vested in one supreme court, and in such inferior courts as the Congress may from time to time ordain and establish.' These provisions would grant the CFC the power to invalidate acts of Congress that adversely affect property rights in violation of the Constitution. The CFC would be authorized to strike statutes from the books at the request of private parties, thereby affecting the rights of third parties protected by the statutes but not before the court. We believe that grant of power probably violates Article III."

[235] S. 605, *supra* note 214, at Title III.

[236] *Id.* at § 301(a)(2).

[237] *Id.* at § 301(c).

property.[238] It also requires agencies to review, and "where appropriate," repromulgate all regulations that "result in takings of private property under the Act, and reduce such takings of private property to the maximum extent possible.[239] In addition, agencies would also be required to submit to Congress within 120 days after passage of the Act any statutory changes necessary to meet the purposes of the Act.[240]

In addition, S. 605 requires, with limited exceptions,[241] that all agencies of the federal government complete a "private property taking impact analysis before issuing or promulgating any policy, regulation, proposed legislation, or related agency action which is likely to result in a taking of private property."[242] This takings impact analysis must analyze: the purpose of the agency action,[243] the likelihood of a taking,[244] whether it is likely to require compensation,[245] alternatives that would achieve the intended purpose

---

[238] *Id.* at § 404(a) and § 403(a)(1)(B).

[239] *Id.* at § 404(a).

[240] *Id.* at § 404(b)(3). Although the impact of this requirement is unclear, it could potentially require agencies to drastically alter the way they conduct business. For example, in order to be consistent with the act, this requirement could possibly necessitate a statutory change to § 404 of the Clean Water Act to require the Army Corps of Engineers to assess the impact on property values before denying a permit to fill a wetland.

[241] *Id.* at § 403(a)(2).

[242] *Id.* at § 403(a)(1)(B).

[243] *Id.* at § 403(a)(3)(A).

[244] *Id.* at § 403(a)(3)(B).

[245] *Id.* at § 403(a)(3)(C).

and reduce the likelihood of a taking,[246] and an estimate of potential liability if the action is found to constitute a taking.[247]

Finally, Title V of the proposed Act, entitled The Private Property Owner's Administrative Bill of Rights, primarily addresses regulatory actions under the Endangered Species Act[248] and section 404 of the Clean Water Act.[249] This provision directs federal agency heads enforcing the Endangered Species Act and the Clean Water Act to: (1) comply with State and tribal laws;[250] (2) act in the manner least intrusive to private property rights;[251] (3) implement rules and regulations to ensure the protection of those rights;[252] (4) refrain from entering private property to acquire information without the written consent and notice of the owner;[253] and (5) refrain from using data collected on privately owned property to implement or enforce such Acts without providing the property owner with access to and the opportunity to dispute such data.[254] The Clean Water Act and the ESA would also be amended by the act to create property owner

---

[246] *Id.* at § 403(a)(3)(D).

[247] *Id.* at § 403(a)(3)(E).

[248] Endangered Species Act of 1973, 16 U.S.C.A. §1531 to 1544 (1973).

[249] Federal Water Pollution Control Act, 33 U.S.C.A. §1344.

[250] S. 605, *supra* note 214 at § 503(a)(1).

[251] *Id.* at § 503(a)(2).

[252] *Id.* at § 503(b).

[253] *Id.* at § 504.

[254] *Id.*

appeal rights.[255] Agency heads would also be required to provide owners of private property adversely affected by agency action with the option of either: (1) selling the property to the agency for fair market value without use restrictions;[256] (2) receiving compensation for any resulting decrease in the property's fair market value resulting from such restrictions;[257] or (3) entering into arbitration.[258]

B. Legislation Passed by the House - H.R. 925

In Contrast to S. 605, H.R. 925, The Private Property Protection Act of 1995,[259] which was passed by the House of Representatives on March 3, 1995, is much more limited in its scope. The greatest difference between the two bills is that H.R. 925 only applies to property that has been limited by agency action taken pursuant to one of the following: Section 404 of the Clean Water Act, the Endangered Species Act of 1979, Title XII of the Food Security Act of 1985, or with respect to certain water rights.[260]

---

[255] *Id.* at § 506.

[256] *Id.* at § 508(c)(1).

[257] *Id.* at § 508(c)(2).

[258] *Id.* at § 508(d)(2).

[259] H.R. 925, 104th Cong., 1st Sess. (1995).

[260] *Id.* at § 10(5). Section 404 of the Clean Water Act creates a permit program administered by the Army Corps of Encineers for the discharge of dredge and fill material into the waters of the United States. The application of this provision to wetlands has been controversial. The goal of the Endangered Species Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The Act requires the Fish and Wildlife Service (FWS) to list those species it finds to be endangered or threatened. Section 7 of the Act imposes a series of duties, procedural and substantive, on all federal agencies. Each agency must insure, in consultation with the FWS or the National Marine Fisheries Service, that its actions are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of a species critical habitat. Section 9 of the Act prohibits any
(continued. . .)

However, H.R. 925 contains many provisions similar to its counterpart in the Senate. H.R. 925 states as its policy and direction that "no law or agency action should limit the use of privately owned property so as to diminish its value."[261] It also requires agencies to ensure that agency actions not "limit the use of privately owned property so as to diminish its value."[262] In addition, it establishes a 20 percent decrease in fair market value as the threshold for a taking. If the decrease in value is 50 percent or greater the owner may choose to have the government purchase the property.[263] Once the government pays compensation, the property may not be used contrary to limitations imposed by agency action.[264] H.R. 925 contains exceptions for state defined nuisances;[265] zoning laws;[266] actions necessary to prevent hazards to health, safety or damage to specific property;[267] and lands effected by the Navigation Servitude.[268]

---

[260] (. . . continued)
person from "taking" any endangered species or threatened species. The Food Security Act of 1985 directs the Secretary of Agriculture to establish perpetual wetland conservation easements to protect and restore wetlands or converted wetlands that exist on inventoried property, as determined by the Secretary in accordance with the Act. Wetland easements are not to be established with regards to wetlands converted prior to December 23, 1985. With respect to water rights the Act only applies with respect to an owner's right to use or receive water pursuant to the "Reclamation Acts (43 U.S.C. 371 *et seq.*), the Federal Land Policy Management Act (43 U.S.C. 1701 *et seq.*); or Section 6 of the Forest and Rangeland Renewable Resources Planning Act of 1974 (16 U.S.C. 1604).

[261] *Id.* at § 2 (1995).

[262] *Id.*

[263] *Id.* at § 3(a).

[264] *Id.* at § 3(b).

[265] *Id.* at § 4.

[266] *Id.*

[267] *Id.* at § 5(a).

[268] *Id.* at § 5(b).

In order to receive funds under the House bill, owners must petition the agency for payment within 180 days after receiving actual notice of the agency action.[269] After the petition is made, the agency and the landowner are to begin negotiating a settlement. If the parties do not reach agreement within 180 days after the landowner's request for payment, the landowner may choose to take the matter to binding arbitration or to initiate a civil action for compensation.[270] H.R. 925 also requires that payments be made from agency appropriations.[271]

C. The Administration's Opposition to S. 605

President Clinton in a letter to Senator Hatch, Chairman of the Committee on the Judiciary, United States Senate, dated December 13, 1995, stated his intention to veto S. 605 if passed. In his letter the President stated that:

> Though styled as an effort to protect private property, a goal which I strongly support. S. 605 does not protect legitimate private property rights. . . . It would effectively block implementation and enforcement of existing laws protecting public health, safety, and the environment.
>
> In addition, S. 605 creates one of the most expensive new federal spending programs in recent history, costing taxpayers tens of billions of dollars. It sets up new bureaucracies and innumerable opportunities for litigation and establishes unprecedented statutory entitlements beyond those guaranteed by the Constitution. Clearly, this is not the right way to achieve our common goal of protecting private property rights.

---

[269] *Id.* at § 6(a).

[270] *Id.* at § 6(c).

[271] *Id.* at § 6(f).

Much of the administration's opposition to S. 605 is based on the Office of Management and Budget's estimate of spending for compensation under H.R. 925, which would be $28 billion through the year 2002.[272] Because the compensation scheme in S. 605 is far broader than that of H.R. 925, the Office of Management and Budget expects the cost of S. 605 to be several times the $28 billion of the House-passed legislation.[273] The administration also argues that S.605's imposition of federal liability for action by State and local officials would remove the financial incentive to ensure that State and local action minimizes impacts on private property. This, the administration speculates, would cause federal agencies to monitor State and local actions under federal actions more closely, or to withdraw delegated authority all together.[274] Thus, increasing the costs and no doubt decreasing the efficiency of the affected programs.

The administration also argues that the legislation would block implementation and enforcement of existing laws protecting public health, safety and the environment. This concern is based on the premise that if the legislation became law, the existing laws would simply be too costly to pursue.[275] Thus, the administration argues that the proposed bills are essentially an attempt to gut existing environmental laws rather than an attempt to protect private property.[276]

---

[272] Statement of John R. Schmidt, Associate Attorney General, Criminal Division, *supra* note 235, at 12.

[273] *Id.*

[274] *Id.* at 13.

[275] *Id.* at 17.

[276] *Id.*

D. Potential Impacts of S.605 and H.R. 925 on Overflight Takings Cases

Because H.R. 925's applicability is limited to a few specified statutes none of which impact on the flight of aircraft, if it or a similar bill were to become law, the law related to overflight takings would remain unchanged. Thus, there would be no impact on the way DoD approaches overflight takings cases. If, however, a measure similar to S. 605 were to become law, it would drastically increase the Department's liability for the taking of property as a result of flying activities.

Currently, pursuant to *Causby* and the cases that interpret it, a taking as a result of an overflight can only be found to have occurred if: (1) the planes fly directly over the plaintiff's land; (2) the flights are low (below 500 feet) and frequent; (3) the flights directly and immediately interfere with the claimant's enjoyment and use of the land; and (4) the interference with enjoyment and use is substantial. S. 605's requirement that compensation must be paid whenever the fair market value of an affected portion of a parcel of land is decreased by 33 percent, however, would essentially overturn *Causby*. The test under S. 605 would only ask whether the agency's activity reduces the value of the property by 33 percent. Thus, flights above 500 feet that caused a reduction in value of 33 percent would create a basis for compensation. On this same principle, *Causby*'s requirement that the land be directly overflown would no longer be applicable. The

requirements that the overflights directly interfere with the claimant's use and enjoyment of the land and that the interference must be substantial would also become inapplicable.

DoD has designed countless flight patterns based on the presumption that overflights at altitudes greater than 500 feet are not compensable. Thus, the Department's liability for claims based solely on a reduction in fair market value could be expected to increase dramatically.[277] This is especially true in light of the continuing closure of bases which are often accompanied by the transfer of missions to other bases. The disturbances caused by the aircraft that are a necessary part of effective training could reduce the fair market value of lands adjacent to the base giving rise to takings claims not cognizable under existing case law.[278] "This in turn, could force the Department to undertake less realistic training or curtail training altogether, both options with potentially devastating national security implications."[279]

E. Potential Impacts of S. 605 on Cases Related to AICUZ Implementation

In addition to overturning the long standing takings jurisprudence that has developed to deal with overflight takings, S. 605 threatens to undermine DoD's AICUZ program as well. As discussed above, DoD is not currently liable for any decrease in

---

[277] Letter from Judith A. Miller, General Counsel of the Department of Defense, to Senator Robert J. Dole, Majority Leader, United States Senate 1 (May 3, 1996).

[278] *Id.* at 2.

[279] *Id.*

property values that results from the publication of an AICUZ study.[280] It is, however, very likely that the mere publication of an AICUZ study could reduce by 33 percent the value of property designated as an Accident Potential Zone or as an area not compatible with certain uses because of noise. Thus, if S. 605 becomes law, DoD should expect to incur financial liability for the mere publication of AICUZ studies.

Based on these concerns, the Department of Defense by way of a letter from the General Counsel of the Department to former Senator Dole, who at the time was the Majority Leader of the United States Senate, expressed its concern that "S. 605 would unacceptably compromise the Department's ability to ensure military readiness. For this reason, the Department of Defense strongly opposes S. 605 and will urge the President to veto the bill, should it pass."[281]

VII. Conclusion

As the Air Force continues to carry out its responsibilities pursuant to the base closure process, it will experience an increase in operations at many of the remaining bases, especially those that are gaining bases for aircraft squadrons or wings. Not only

---

[280] *See* Stephens v. Untied States, 11 Cl. Ct. 352, 363 (1986); Branning v. United States, 654 F. 2d 88 (Ct. Cl., 1981).

[281] Letter from Judith Miller to Senator Dole, *supra* note 277, at 2. Based on recent statements by House Speaker Newt Gingrich, the President's threatened veto, and the fact a Presidential election is approaching, it is highly unlikely that the Republican Congress will attempt to pass property rights legislation until after the November election. This is especially true in light of the House Speaker's recent statement encouraging Republicans to "back off for now on regulatory legislation that targets environmental protection." He also specifically urged Dole to dump plans to call up his broad property rights bill. *Gingrich Urges GOP to Lower Profile on Regulatory Issues*, CQ's Congressional Monitor, May 15, 1996, at 4.

will many bases see an increase in the number of aircraft, but some bases will also have new or different types of aircraft relocated to the base. This mix of increased operations and the introduction of new, potentially nosier, aircraft to a base has historically been a sure formula for generating claims of inverse condemnation for overflights. As discussed above, the future of litigation in these cases, however, should be clearer. The Supreme Court's holding in *Lucas*, should strengthen the Government's argument that inverse condemnation claims for flights above 500 feet are not compensable. For those cases below 500 feet, *Causby* and its progeny provide a well defined body of case law which should allow the Air Force to determine, with some predictability, the legal consequences of its actions when flying low over private lands.

In order to lessen the potential for overflight takings claims, the Air Force must continue to aggressively augment the AICUZ program. The program's land use compatibility guidelines, when implemented as part of the local zoning process to limit incompatible development in the area of air bases, serve to reduce the Air Force's potential liability for overflight takings claims that arise on lands covered by the program. The AICUZ program also serves to protect air installations from encroachment by local communities. An active AICUZ program, coordinated effectively with local government officials can serve to greatly reduce potential tension between air installations and local development. If the program is not coordinated effectively, or if local authorities fail to implement AICUZ findings, the potential for conflicts between the installation and the local community are greatly increased.

In order to limit its liability for overflight takings claims and for claims of inverse condemnation associated with the AICUZ program, the DoD should continue to oppose passage of S.605 in its current form. As addressed above, the tests articulated in the Supreme Court's holdings in *Lucas* and *Causby*, provide more than sufficient protection to the constitutional rights of those whose lands are overflown by aircraft. The broad liability imposed by S.605's requirement to compensate landowners based on a strict 33 percent reduction in value test, however, could potentially result in a drastic increase in takings claims against the Department. Such a requirement would make the Department liable for overflights even where lands are not directly overflown. It would also make the Department liable for diminution in value of property that results from merely publishing the results of an AICUZ study. Thus, DoD should continue to oppose passage of the legislation or in the alternative request that the administration attempt to negotiate an exception to the legislation for military operations.

ATTACHMENT 1

32 CFR 256.8

LAND USE COMPATIBILITY GUIDELINES FOR ACCIDENT POTENTIAL

Land Use Category	Compatibility n1		
	Clear zone	APZ I	APZ II
Residential:			
Single family	No	No	Yes. n2
2 to 4 family	.....do	.....do	No.
Multifamily dwellings	.....do	.....do	Do.
Group quarters	.....do	.....do	Do.
Residential hotels	.....do	.....do	Do.
Mobile home parks or courts	.....do	.....do	Do.
Other residential	.....do	.....do	Do.
Industrial manufacturing: n3			
Food and kindred products	.....do	.....do	Yes.
Textile mill products	.....do	.....do	Do.
Apparel	.....do	.....do	No.
Lumber and wood products	.....do	Yes	Do.
Furniture and fixtures	.....do	.....do	Do.
Paper and allied products	.....do	.....do	Do.
Printing, publishing	.....do	.....do	Do.
Chemicals and allied products	.....do	No	No.
Petroleum refining and related industries	.....do	.....do	Do.
Rubber and miscellaneous plastic goods	.....do	.....do	Do.
Stone, clay, and glass products	.....do	Yes	Yes.
Primary metal industries	.....do	.....do	Do.
Fabricated metal products	.....do	.....do	Do.
Professional, scientific and controlling instruments	.....do	No	No.
Miscellaneous manufacturing	.....do	Yes	Yes.
Transportation, communications and utilities: n4			

ATTACHMENT 1 (continued)

Railroad, rapid rail transit (ongrade)	Yes	Yes n4	Yes.
Highway and street ROW	.....do	Yes	Do.
Auto parking	No	.....do	Do.
Communication	Yes	.....do	Do.
Utilities	.....do	Yes n4	Do.
Other transportation, communications and utilities	.....do	Yes	Do.
Commercial/retail trade:			
Wholesale trade	No	.....do	Do.
Building materials -- retail	.....do	.....do	Do.
General merchandise -- retail	.....do	No	Do.
Food -- retail	.....do	.....do	Do.
Automotive, marine, aviation -- retail	.....do	Yes	Do.
Apparel and accessories -- retail	.....do	No	Do.
Furniture, homefurnishing -- retail	.....do	.....do	Do.
Eating and drinking places	.....do	.....do	No.
Other retail trade	.....do	.....do	Yes.
Personal and business services: n5			
Finance, insurance and real estate	.....do	.....do	Do.
Personal services	.....do	.....do	Do.
Business services	.....do	.....do	Do.
Repair services	.....do	Yes	Do.
Professional services	.....do	No	Do.
Contract construction services	.....do	Yes	Do.
Indoor recreation services	.....do	No	Do.
Other services	.....do	.....do	Do.
Public and quasi-public services:			
Government service	.....do	.....do	Yes. n5
Educational services	No	No	No.
Cultural activities	.....do	.....do	Do.
Medical and other health services	.....do	.....do	Do.
Cemeteries	.....do	Yes n6	Yes. n6

ATTACHMENT 1 (continued)

Nonprofit organization including churches	.....do	No	No.
Other public and quasi-public services	.....do	.....do	Yes.
Outdoor recreation:			
Playground's neighboring parks	.....do	.....do	Yes.
Community and regional parks	.....do	Yes n7	Yes. n7
Nature exhibits	.....do	Yes	Yes.
Spectator sports including arenas	.....do	No	No.
Golf course, n8 riding stables n9	.....do	Yes	Yes.
Water based recreational areas	.....do	.....do	Do.
Resort and group camps	.....do	No	No.
Entertainment assembly	.....do	.....do	Do.
Other outdoor recreation	.....do	Yes n7	Yes.
Resource production and extraction and open land:			
Agriculture n10	Yes	Yes	Do.
Livestock farming, animal breeding n11	No	.....do	Do.
Forestry activities n12	No n13	Yes	Do.
Fishing activities and related services n14	No n15	Yes n14	Do.
Mining activities	No	Yes	Do.
Permanent open space	Yes	.....do	Do.
Water areas n14	.....do	.....do	Do.

Footnotes.

n1 A "Yes" or "No" designation for compatible land use is to be used only for gross comparison. Within each, uses exist where further definition may be needed as to whether it is clear or normally acceptable/unacceptable owing to variations in densities of people and structures.

n2 Suggested maximum density 1-2 DU/AC, possibly increased under a planned unit development where maximum lot covered less than 20 percent.

n3 Tactics to be considered: Labor intensity, structural coverage, explosive characteristics, air pollution.

n4 No passenger terminals and no major above ground transmission lines in APZ I.

n5 Low intensity office uses only. Meeting places, auditoriums, etc., not recommended.

n6 Excludes chapels.

n7 Facilities must be low intensity.

n8 Clubhouse not recommended.

n9 Concentrated rings with large classes not recommended.

n10 Includes livestock grazing but excludes feedlots and intensive animal husbandry.

n11 Includes feedlots and intensive animal husbandry.

n12 No structures (except airfield lighting), buildings or above ground utility/communication lines should be located in the clear zone. For further runway safety clearance limitations pertaining to the clear zone see AFM 86-6 TM 5-803-4 and NAVFAC P-80.2.

n13 Lumber and timber products removed due to establishment, expansion or maintenance of clear zones will be disposed of in accordance with DoD Instruction 4170.7, "Natural Resources -- Forest Management," June 21, 1965 (32 CFR 233) and DoD Instruction 7310.1, "Accounting and Reporting for Property Disposal and Proceeds from Sale of Disposable Personal Property and Lumber or Timber Products," July 10, 1970.1

n14 Includes hunting and fishing.

n15 Controlled hunting and fishing may be permitted for the purpose of wildlife control.

ATTACHMENT 2

Guidelines for Considering Noise in Land Use Planning and Control
TABLE 2. SUGGESTED LAND USE COMPATIBILITY GUIDELINES

SLUCM No.	Land Use Name	Noise Zones/DNL Levels in Ldn A 0-55	B 55-65	C-1 65-70	C-2 70-75	D-1 75-80	D-2 80-85	D-3 85+
10	**Residential**							
11	Household Units							
11.11	Single units - detached	Y	Y*	25[1]	30[1]	N	N	N
11.12	Single units-semidetached	Y	Y*	25[1]	30[1]	N	N	N
11.13	Single units-attached row	Y	Y*	25[1]	30[1]	N	N	N
11.21	Two units-side-by-side	Y	Y*	25[1]	30[1]	N	N	N
11.22	Two units-one above the other	Y	Y*	25[1]	30[1]	N	N	N
11.31	Apartments-walk up	Y	Y*	25[1]	30[1]	N	N	N
11.32	Apartments-elevator	Y	Y*	25[1]	30[1]	N	N	N
12	Group quarters	Y	Y*	25[1]	30[1]	N	N	N
13	Residential hotels	Y	Y*	25[1]	30[1]	N	N	N
14	Mobile home parks or courts	Y	Y*	N	N	N	N	N
15	Transient lodgings	Y	Y*	25[1]	30[1]	35[1]	N	N
16	Other residential	Y	Y*	25[1]	30[1]	N	N	N
20	**Manufacturing**							
21	Food and kindred products-manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
22	Textile mill products-manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
23	Apparel and other finished products made from fabrics, leather, and similar materials - manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
24	Lumber and wood products (except furniture) - manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
25	Furniture and fixtures - manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
26	Paper and allied products - manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
27	Printing, publishing, and allied industries	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
28	Chemicals and allied products - manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
29	Petroleum refining and related industries	Y	Y	Y	Y[2]	Y[3]	Y[4]	N

*The designation of these uses as "compatible" in this zone reflects individual Federal agencies' consideration of general cost and feasibility factors as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, may have different concerns or goals to consider. For an indication of possible community reaction in residential environments at various levels of cumulative noise. Table D-1 in Appendix D should be consulted.

TABLE 2. SUGGESTED LAND USE COMPATIBILITY GUIDELINES (continued)

SLUCM No.	Land Use Name	Noise Zones/DNL Levels in Ldn A 0-55	B 55-65	C-1 65-70	C-2 70-75	D-1 75-80	D-2 80-85	D-3 85+
30	**Manufacturing(Cont'd)**							
31	Rubber and misc. plastic products - manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
32	Stone, clay and glass products-manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
33	Primary metal industries	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
34	Fabricated metal products-manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
35	Professional, scientific, and controlling instruments, photographic and optical goods; watches and clocks-manufacturing	Y	Y	Y	25	30	N	N
39	Miscellaneous manufacturing	Y	Y	Y	Y[2]	Y[3]	Y[4]	
40	**Transportation, communication and utilities**							
41	Railroad, rapid rail transit and street railway transportation	Y	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
42	Motor vehicle transportation	Y	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
43	Aircraft transportation	Y	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
44	Marine craft transportation	Y	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
45	Highway and street right-of-way	Y	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
46	Automobile parking	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
47	Communication	Y	Y	Y	25[5]	30[5]	N	N
48	Utilities	Y	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
49	Other transportation, communication and utilities	Y	Y	Y	25[5]	30[5]	N	N
50	**Trade**							
51	Wholesale trade	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
52	Retail trade - building materials, hardware and farm equipment	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
53	Retail Trade - general merchandise	Y	Y	Y	25	30	N	N
54	Retail Trade - food	Y	Y	Y	25	30	N	N
55	Retail Trade - automotive, marine craft, aircraft and accessories	Y	Y	Y	25	30	N	N
56	Retail trade - apparel and accessories	Y	Y	Y	25	30	N	N
57	Retail Trade - furniture, home furnishings and equipment	Y	Y	Y	25	30	N	N
58	Retail Trade - eating and drinking establishments	Y	Y	Y	25	30	N	N
59	Other retail trade	Y	Y	Y	25	30	N	N

TABLE 2. SUGGESTED LAND USE COMPATIBILITY GUIDELINES (continued)

SLUCM No.	Land Use Name	Noise Zones/DNL Levels in Ldn A 0-55	B 55-65	C-1 65-70	C-2 70-75	D-1 75-80	D-2 80-85	D-3 85+
60	**Services**							
61	Finance, insurance and real estate services	Y	Y	Y	25	30	N	N
62	Personal services	Y	Y	Y	25	30	N	N
62.4	Cemeteries	Y	Y	Y	Y[2]	Y[3]	Y[4,11]	Y[6,11]
63	Business services	Y	Y	Y	25	30	N	N
64	Repair services	Y	Y	Y	Y[2]	Y[3]	Y[4]	N
65	Professional services	Y	Y	Y	25	30	N	N
65.1	Hospitals, nursing homes	Y	Y*	25*	30*	N	N	N
65.1	Other medical facilities	Y	Y	Y	25	30	N	N
66	Contract construction services	Y	Y	Y	25	30	N	N
67	Governmental services	Y	Y*	Y*	25*	30*	N	N
68	Educational services	Y	Y*	25*	30*	N	N	N
69	Miscellaneous services	Y	Y	Y	25	30	N	N
70	**Cultural, entertainment and recreational**							
71	Cultural activities (including churches)	Y	Y*	25*	30*	N	N	N
71.2	Nature exhibits	Y	Y*	Y*	N	N	N	N
72	Public assembly	Y	Y	Y	N	N	N	N
72.1	Auditoriums, concert halls	Y	Y	25	30	N	N	N
72.11	Outdoor music shells, amphitheaters	Y	Y*	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	Y	Y	Y[7]	Y[7]	N	N	N
73	Amusements	Y	Y	Y	Y	N	N	N
74	Recreational activities (include. golf courses, riding stables, water recreation)	Y	Y*	Y*	25*	30*	N	N
75	Resorts and group camps	Y	Y*	Y*	Y*	N	N	N
76	Parks	Y	Y*	Y*	Y*	N	N	N
79	Other cultural, entertainment and recreation	Y	Y*	Y*	Y*	N	N	N

*The designation of these uses as "compatible" in this zone reflects individual Federal agencies' consideration of general cost and feasibility factors as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, may have different concerns or goals to consider. For an indication of possible community reaction in residential environments at various levels of cumulative noise. Table D-1 in Appendix D should be consulted.

TABLE 2. SUGGESTED LAND USE COMPATIBILITY GUIDELINES (continued)

SLUCM No.	Land Use Name	Noise Zones/DNL Levels in Ldn A 0-55	B 55-65	C-1 65-70	C-2 70-75	D-1 75-80	D-2 80-85	D-3 85+
80	**Resource production and extraction**							
81	Agriculture (except livestock)	Y	Y	Y[8]	Y[9]	Y[10]	Y[10,11]	Y[10,11]
81.5 to 81.7	Livestock farming and animal breeding	Y	Y	Y[8]	Y[9]	N	N	N
82	Agricultural related activities	Y	Y	Y[8]	Y[9]	Y[10]	Y[10,11]	Y[10,11]
83	Forestry activities and related services	Y	Y	Y[8]	Y[9]	Y[10]	Y[10,11]	Y[10,11]
84	Fishing activities and related services	Y	Y	Y	Y	Y	Y	Y
85	Mining activities and related services	Y	Y	Y	Y	Y	Y	Y
89	Other resource production and extraction	Y	Y	Y	Y	Y	Y	Y

NOTES FOR TABLE 2

1. a) Although local conditions may require residential use, it is discouraged in C-1 and strongly discouraged in C.2. The absence of viable alternative development options should be determined and an evaluation indicating that a demonstrate community need or residential use would not be met if development were prohibited in these zones should be conducted prior to approvals.

   b) Where the community determines that residential uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB (None C-1) and 30 dB (None C-2) should be Incorporated into building codes and be considered in individual approvals. Normal construction can be expected to provide a NLR of 20 dB, thus the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. Additional considerations should be given to modifying NLR levels based on peak noise levels.

   c) NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, design and use of berms and barriers can mitigate outdoor noise exposure particularly form ground level sources. *Measures that reduce noise at a site should be used wherever practical in preference to measures which only protect interior spaces.*

2. Measures to achieve NLR of 25 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

3. Measures to achieve NLR of 30 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

NOTES FOR TABLE 2 (continued)

4. Measures to achieve NLR of 35 must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.

5. If noise sensitive use indicated NLR; if not use is compatible.

6. No buildings

7. Land use compatible provided special sound reinforcement systems are installed.

8. Residential buildings require a NLR of 25.

9. Residential buildings require a NLR of 30.

10. Residential buildings not permitted.

11. Land use not recommended, but if community decides use is necessary, hearing protection devices should be worn by personnel.

Key to Table 2

SLUCM	Standard Land Use Coding Manual
Y (Yes)	Land Use and related structures compatible without restrictions.
N (No) should be	Land use and related structures are not compatible and prohibited.
NLR (Noise Level Reduction)	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
$Y^{\#}$	Land Use and related structures generally compatible; see notes 2 through 4.
25, 30 or 35	Land Use and related structures generally compatible; measures to achieve NLR of 25, 30 or 35 must be incorporated into design and construction of structure.
25*, 30* or 35*	Land Use generally compatible with NLR; however, measures to achieve an overall noise reduction do not necessarily solve noise difficulties and additional evaluation is warranted.